

Contract No.: 500-92-0011(06)
MPR Reference No.: 8298-010
ASPE PIC ID No: 6292-2

The Evaluation of the Medicare Choices Demonstration

Final Report

November 21, 2000

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CONTENTS

Chapter	Page
EXECUTIVE SUMMARY	xi
I. INTRODUCTION	1
A. THE MEDICARE CHOICES DEMONSTRATION	2
1. Background	2
2. Objectives of the Demonstration	3
B. OBJECTIVES OF AND APPROACH TO THE EVALUATION	9
C. ORGANIZATION OF THIS REPORT	11
II. DATA AND METHODOLOGY	13
A. DATA ON MCO CHARACTERISTICS	13
B. INDIVIDUAL-LEVEL DATA AND SAMPLES	15
1. Claims-Based Sample	15
2. Survey-Based Sample	21
C. METHODS	30
1. Estimation Procedures	32
2. Models of Access and Satisfaction	34
3. Subgroup Estimates	35
4. Control Variables	36
III. CHARACTERISTICS AND EXPERIENCES OF THE DEMONSTRATION MCOs	39
A. COMMON THEMES	39

CONTENTS (continued)

Chapter III.

(continued)	B.	MCO CHARACTERISTICS AND EXPERIENCE	41
	1.	Background and History	41
	2.	Reasons for Participating in the Demonstration	47
	3.	Market Environment	50
	4.	Changes in MCO Structure, Organization, and Philosophy	56
	C.	BENEFIT OFFERINGS	58
	1.	Benefits in Year One	58
	2.	Benefits in Year Two	66
	3.	Benefits in 2000	67
	D.	MARKETING STRATEGIES AND EXPERIENCE	71]
	1.	Initial Approach	71
	2.	Marketing Experience and Modifications to Approach	73
	E.	PROVIDER NETWORK AND PAYMENT	75
	1.	Provider Network	76
	2.	Provider Payment	81
	3.	Distributing Financial Risk	83
	F.	QUALITY ASSURANCE AND UTILIZATION MANAGEMENT ...	84
	1.	QA and UM Methods	86
	2.	Prior Authorization	87
	3.	Provider and Member Incentives for Quality	88
	4.	Issues for Open Network Models	89
	G.	PAYMENT ARRANGEMENTS WITH HCFA AND COLLECTION OF ENCOUNTER DATA	89
	1.	Payment Arrangements with HCFA	89
	2.	Collection of Encounter Data	91
	H.	FINANCIAL PERFORMANCE AND UTILIZATION EXPERIENCE	98

CONTENTS (continued)

Chapter

III.

(continued)	I.	MCO WITHDRAWALS	99
	1.	Reasons for MCO Withdrawals	100
	2.	Making the Decision to Leave	103
IV.		DISENROLLMENT, BIASED SELECTION, AND EFFECTS ON MEDICARE COSTS	105
	A.	PRIOR RESEARCH	106
	B.	RESEARCH QUESTIONS	108
	C.	ENROLLMENT IN AND DISENROLLMENT FROM THE DEMONSTRATION	109
	1.	Beneficiary Enrollment History	109
	2.	Characteristics of Enrollees and Nonenrollees	112
	3.	Reasons for Enrollment	116
	4.	Disenrollment Rates	119
	5.	Reasons for Disenrollment	125
	D.	BIASED SELECTION	127
	1.	Overview of the Measures	127
	2.	Comparison of Enrollees and Nonenrollees	129
	3.	Analysis of Biased Disenrollment	137
	E.	EFFECTS ON MEDICARE COSTS	140
V.		EFFECTS ON ACCESS AND SATISFACTION WITH CARE	147
	A.	PREVIOUS RESEARCH	149
	B.	RESEARCH QUESTIONS AND OUTCOME MEASURES	150
	C.	RELATIONSHIP WITH A PERSONAL PHYSICIAN OR NURSE ..	152

CONTENTS (continued)

Chapter

V.

(continued)	D.	EFFECTS ON ACCESS TO CARE	156
	1.	Overall Effects	156
	2.	MCO-Level Effects	162
	3.	Effects for Beneficiary Subgroups	165
	E.	EFFECTS ON SATISFACTION WITH CARE	168
	1.	Overall Effects	168
	2.	MCO-Level Effects	171
	3.	Effects for Beneficiary Subgroups	171
	4.	Comparison of Current Enrollees to Disenrollees	173
	5.	Enrollees' Satisfaction with MCO Customer Service	173
	F.	USE OF PREVENTIVE CARE	179
	G.	ENROLLEES' UNDERSTANDING OF THEIR MCOs	182
	H.	ENROLLEES' USE OF OUT-OF-NETWORK SERVICES	186
VI.		CONCLUSIONS	191
	A.	SUMMARY OF KEY FINDINGS	191
	1.	MCO Characteristics and Experiences	191
	2.	Disenrollment, Biased Selection, and Effects on Medicare Costs	195
	3.	Effects on Access to and Satisfaction with Care	197
	B.	DISCUSSION	201
		REFERENCES	203

TABLES

I.1	THE 13 MCOs IN THE MEDICARE CHOICES DEMONSTRATION	7
II.1	SELECTION OF ENROLLEE CLAIMS-BASED SAMPLE	13
II.2	SIZE OF THE CLAIMS-BASED SAMPLE AND MINIMUM DETECTABLE DIFFERENCES FOR COMPARISONS OF ENROLLEES WITH NONENROLLEES	17
II.3	ENROLLEE AND NONENROLLEE FRAME AND SAMPLE SIZES FOR 10 MCOs IN THE SURVEY	25
II.4	SURVEY SAMPLE SIZES AND RESPONSE RATES	27
II.5	COMPARISON OF RESPONDENTS WITH NONRESPONDENTS	28
II.6	PRECISION OF THE SURVEY SAMPLE	31
II.7	MEANS OF INDEPENDENT VARIABLES IN THE MULTIVARIATE ANALYSIS OF SURVEY DATA	37
III.1	OVERVIEW OF THE 13 MCOs IN THE MEDICARE CHOICES DEMONSTRATION	42
III.2	CHARACTERISTICS OF THE SERVICE AREAS OF THE MEDICARE CHOICES DEMONSTRATION MCOs	51
III.3	BENEFITS AND COST SHARING FOR SELECTED MEDICARE SERVICES, YEAR 1	60
III.4	ADDITIONAL BENEFITS OFFERED BY DEMONSTRATION MCOs, YEAR 1	62
III.5	OUT-OF-NETWORK OPTIONS/SELF-REFERRAL BENEFITS	65
III.6	CHANGES IN BENEFIT OFFERINGS IN 2000	68
III.7	SIZE AND COMPOSITION OF PROVIDER NETWORKS	77
III.8	ENCOUNTER-DATA PROCESSING AND SUBMISSION	93
III.9	MCOs THAT WITHDREW FROM THE MEDICARE CHOICES DEMONSTRATION	102

TABLES (continued)

IV.1	ENROLLMENT HISTORY OF DEMONSTRATION ENROLLEES	110
IV.2	COMPARISON OF THE CHARACTERISTICS OF ENROLLEES AND NONENROLLEES	113
IV.3	COMPARISON OF SURVEY CHARACTERISTICS OF ENROLLEES AND NONENROLLEES	115
IV.4	BENEFICIARIES' REASONS FOR ENROLLING IN A MEDICARE CHOICES DEMONSTRATION MCO	117
IV.5	DISENROLLMENT RATES AND SUBSEQUENT ENROLLMENT BEHAVIOR OF DISENROLLEES	121
IV.6	DISENROLLMENT RATES, BY BENEFICIARY SUBGROUP	123
IV.7	DISENROLLMENT DECISIONS OF BENEFICIARIES AFFECTED BY MCO WITHDRAWAL	124
IV.8	REASONS FOR DISENROLLMENT	126
IV.9	COMPARISON OF BASELINE EXPENDITURES FOR ENROLLEES AND NONENROLLEES	130
IV.10	COMPARISON OF ENROLLEES AND NONENROLLES ON THE PERCENT WITH HIGH HCC RISK FACTORS	133
IV.11	COMPARISON OF ENROLLEE AND NONENROLLEE MORTALITY RATES	135
IV.12	COMPARISON OF THE HEALTH STATUS OF ENROLLEES AND NONENROLLEES	136
IV.13	COMPARISON OF THE HEALTH STATUS OF ENROLLEES AND NONENROLLEES BY MCO	138
IV.14	DISENROLLMENT BY BASELINE RISK: PERCENT DISENROLLING WITHIN 12 MONTHS	139
IV.15	BASELINE EXPENDITURES BY DISENROLLEES AND CONTINUING ENROLLEES	141
IV.16	BASELINE EXPENDITURES BY CONTINUING ENROLLEES,	

TABLES (continued)

	DISENROLLEES TO FFS, AND SWITCHERS	142
IV. 17	EFFECTS ON MEDICARE PROGRAM COSTS	144
V.1	COMPARISON OF ENROLLEES AND NONENROLLEES ON THEIR RELATIONSHIP WITH A PERSONAL PHYSICIAN OR NURSE	153
V.2	REASONS FOR NOT HAVING A PERSONAL PHYSICIAN OR NURSE	155
V.3	ESTIMATED EFFECTS ON ACCESS TO CARE	157
V.4	ESTIMATED EFFECTS ON ACCESS TO CARE, BY MCO	163
V.5	ESTIMATED EFFECTS ON ACCESS TO CARE FOR SELECTED SUBGROUPS	166
V.6	EFFECTS OF THE DEMONSTRATION ON SATISFACTION WITH CARE	169
V.7	EFFECTS ON SATISFACTION WITH CARE, BY MCO	172
V.8	EFFECTS ON SATISFACTION WITH CARE FOR SELECTED SUBGROUPS	174
V.9	COMPARISON OF ALL ENROLLEES, CURRENT ENROLLEES, AND DISENROLLEES ON SATISFACTION WITH CARE	176
V.10	ENROLLEES' SATISFACTION WITH THEIR MCOs CUSTOMER SERVICE	178
V.11	COMPARISON OF ENROLLEES AND NONENROLLEES ON PREVENTIVE CARE: PERCENTAGE RECEIVING FLU SHOTS AND PHYSICAL EXAMS	180
V.12	COMPARISON OF FEMALE ENROLLEES AND NONENROLLES: PERCENTAGE WHO RECEIVED A MAMMOGRAM IN THE PAST YEAR	182
V.13	ENROLLEES' SELF-RATED KNOWLEDGE OF HOW THEIR MCO WORKS AND HOW TO GET SERVICES PAID FOR	183

TABLES (continued)

V.14	ENROLLEES' UNDERSTANDING OF OUT-OF-NETWORK COVERAGE	185
V.15	ENROLLEES' UNDERSTANDING OF THEIR MCO BY BENEFICIARY SUBGROUP	187
V.16	USE OF OUT-OF-NETWORK SERVICES	188
V.17	TYPES OF AND REASONS FOR SERVICES RECEIVED OUT OF NETWORK	190

EXECUTIVE SUMMARY

The Medicare Choices Demonstration was launched by the Health Care Financing Administration (HCFA) to test both innovative ways of expanding the kinds of managed care options offered to Medicare beneficiaries and new risk-based payment methods for Medicare managed care. Before January 1999, the vast majority of private health plans that participated in Medicare were authorized under the Medicare risk program. Under the demonstration, some of the requirements governing the risk program were modified to allow more health maintenance organizations (HMOs) and new types of organizations, such as provider-sponsored organizations (PSOs) and preferred provider organizations (PPOs), to participate. Part of HCFA's intent in implementing the demonstration was to benefit from some of the managed care innovations developed for privately insured populations. Many of the innovations being tested in the demonstration were subsequently included in the Medicare + Choice (M+C) program enacted under the Balanced Budget Act (BBA) of 1997. The experience under the demonstration is therefore of particular interest in terms of what it may be able to tell us about M+C.

In this final report for the evaluation of the Medicare Choices Demonstration, we address three topics. First, we describe the characteristics of the MCOs that participated in the demonstration, the products they offered, and their operational experience and ultimate success. Second, we assess the direction and magnitude of biased selection and its implications for Medicare program costs. Most of the demonstration MCOs are sponsored by providers, and many offer POS or PPO products. It is important to determine whether these features led to more neutral selection than has been experienced by Medicare risk HMOs. Finally, we assess the effects of the demonstration on access to and satisfaction with care. Access and satisfaction are related concepts that together provide a broad picture of the quality, extent, and outcomes of care from the beneficiary's perspective.

THE MEDICARE CHOICES DEMONSTRATION

MCOs for the Medicare Choices Demonstration were selected in two stages. HCFA released the initial solicitation announcement in June 1995, describing the framework for the demonstration and inviting interested organizations to submit a pre-application form. The agency also indicated that preference would be given to applicants in nine metropolitan areas: Atlanta, GA; Columbus, OH; Hartford, CT; Houston, TX; Jacksonville, FL; Louisville, KY; New Orleans, LA; Philadelphia, PA; and Sacramento, CA. These nine areas were targeted because they had little or no Medicare risk enrollment despite having characteristics expected to provide favorable conditions for the growth of Medicare managed care—namely, moderate to high HMO penetration rates in the private sector, a moderate to high number of HMOs, and Adjusted Average Per Capita Cost (AAPCC) payment rates higher than the United States Per Capita Cost (USPCC). HCFA also indicated that it would consider innovative applications from MCOs in other geographic areas and that it was particularly interested in MCOs whose networks would include rural areas.

Some 372 organizations submitted pre-application forms expressing interest in the demonstration. After reviewing these pre-applications, HCFA invited 52 organizations to submit more detailed, second-round applications. In April 1996, HCFA announced that 25 applicants had been selected as final candidates for the demonstration. Three of these organizations then decided to participate under the regular Medicare risk program, and 9 others withdrew before becoming operational, leaving 13 in the demonstration. The MCOs that withdrew before becoming operational cited a variety of reasons for their decision. Some concluded after further study that their demonstration proposals were not likely to be successful, some were undergoing corporate reorganizations that made it difficult to devote the necessary resources to the demonstration, and some were reportedly having trouble developing their provider networks.

The 13 MCOs that started operating under the demonstration are located in nine metropolitan areas (see Table 1). Nine MCOs are located in five of the metropolitan areas that had been targeted for the demonstration (Atlanta, GA; Columbus, OH; Houston, TX; New Orleans, LA; and Philadelphia, PA). Two MCOs, Health Alliance Medical Plans and Yellowstone Community Health Plan, were selected because they proposed to serve rural areas, and two others, Florida Hospital Healthcare System and the University of California at San Diego (UCSD) Health Plan, were selected because their proposals were judged as promising and innovative. Five MCOs withdrew from the demonstration because of large financial losses, and the contract of a sixth MCO (SCHP) was terminated for cause as of May 1, 2000. Among the seven still active MCOs, demonstration enrollment in April 2000 varied from approximately 3,500 to over 19,000.

Nine MCOs agreed to have their payments under the demonstration set using the hierarchical coexisting conditions (HCC) risk adjuster, through which payments are adjusted on the basis of diagnoses from inpatient and outpatient encounter data. Two MCOs agreed to be paid under the standard AAPCC system, one agreed to receive AAPCC rates in some counties in its service area and a 70/30 blend of the AAPCC and USPCC in counties that had relatively low payment rates, and one MCO agreed to a partial capitation model in which it would receive AAPCC rates for Part B services and a 50/50 blend of AAPCC rates and fee-for-service (FFS) rates for Part A services. However, implementation of the HCC model and the partial capitation model has been delayed because of delays in the submission of complete encounter data. To date, HCFA has implemented diagnosis-based risk adjustment for only two MCOs for only one year (1998).

DATA AND METHODS

We used case study methods to investigate the characteristics, implementation approaches, and experiences of the demonstration MCOs. In that analysis, we relied primarily on data collected from two site visits to each MCO, one after 4 months and another after 16 months of operation. We conducted all other analyses using individual-level data on three samples: (1) the total enrollee sample, (2) the claims-based sample, and (3) the survey-based sample. The total enrollee sample consisted of all beneficiaries who were enrolled in a demonstration MCO on or before December 1, 1998. Using data from the Medicare enrollment files, we used this sample to determine the percentage of enrollees who were relatively new to Medicare and the percentage who had prior Medicare managed care experience, and to compute disenrollment rates.

TABLE 1
THE 13 MCOs IN THE MEDICARE CHOICES DEMONSTRATION

Market/MCO	Date of First Enrollment	Number of Months in the Demonstration ^a	Enrollment After One Year of Operation	Enrollment in April 2000
Atlanta GA				
SCHP	12/1/97	29	2,811	7,346
St. Joseph's	06/1/98	19	3,316	0 ^c
Billings, MT				
Yellowstone Community Health Plan	07/1/97	30	1,595	0 ^c
Champaign-Urbana, IL				
Health Alliance Medical Plans	12/1/97	29	3,865	6,783
Columbus, OH				
Mount Carmel Health Plan	04/1/97	37	6,304	13,180
Ohio Health Alliance	07/1/97	18	5,385	0 ^b
Houston, TX				
Memorial Sisters of Charity	04/1/97	37	5,259	19,030
New Orleans, LA				
Peoples Health Network	09/1/97	32	2,663	11,575
Orlando, FLFlorida Hospital Healthcare System	02/1/97	23	12,081	0 ^b
Philadelphia, PA				
Crozer-Keystone	04/1/97	33	2,715	0 ^c
Health Partners	05/1/97	36	2,476	5,310
Independence Blue Cross	04/1/97	37	5,136	12,714
San Diego, CA				
UCSD Health Plan	07/1/98	22	1,292	3,493

^aAs of April 2000

^bWithdrew from the demonstration as of January 1999.

^cWithdrew from the demonstration as of January 2000.

The claims-based sample consisted of the subset of the total enrollee sample that was continuously enrolled in FFS Medicare throughout a one-year baseline period, as well as a comparison group of beneficiaries in FFS Medicare who lived in the MCOs' service areas ("nonenrollees"). The sample consisted of 44,768 enrollees and 90,139 nonenrollees. Using data from the Medicare enrollment and claims files, we used this sample to assess the direction and magnitude of biased selection and to estimate the effects of the demonstration on Medicare costs.

The survey-based sample consisted of a relatively small sample of enrollees and nonenrollees from whom we collected data in a telephone survey. The enrollee sample was selected from beneficiaries who were enrolled in a demonstration MCO for at least two months during the year ending July 1998 (July 1999 for UCSD). Unlike the claims-based sample, the survey-based sample was not restricted to beneficiaries who were enrolled in FFS Medicare throughout the baseline period. Three MCOs (Florida Hospital Healthcare System, Ohio Health Alliance, and St. Joseph's) were excluded from the survey because they announced their intention to withdraw from the demonstration before the survey was conducted. The survey collected data on a variety of topics, including reasons for enrolling in (and disenrolling from) the demonstration MCOs, enrollees' understanding of how to use their MCOs, access to care, satisfaction with care, use of out-of-network services, health and functional status, and demographic and socioeconomic characteristics. We completed interviews with 3,661 enrollees and 2,716 nonenrollees. The response rate was 65 percent for enrollees and 57 percent for nonenrollees.

MCO CHARACTERISTICS AND EXPERIENCE

Background and History

All of the demonstration MCOs except Independence Blue Cross are (or were until very recently) sponsored by provider systems. These MCOs had varying degrees of managed care experience, which most obtained by accepting "downstream" risk from HMOs. All but one of the provider-sponsored entities were ineligible for the Medicare risk program when the solicitation for the Medicare Choices Demonstration was released. Nine were ineligible because they did not have HMO licenses, one was ineligible because it did not meet the risk program's minimum enrollment requirement, and one did not meet the enrollment composition rule (which required that Medicare and Medicaid enrollees not account for more than 50 percent of an organization's total enrollment).

The nine provider-sponsored MCOs that were ineligible for the Medicare risk program participated in the demonstration under three kinds of authority. Four were permitted by their state to participate in the demonstration without an HMO license: Florida Hospital Healthcare System had no license as a risk-bearing entity, SCHP and St. Joseph's had risk-bearing PSO licenses issued by Georgia, and Crozer-Keystone had a risk-assuming PPO certificate of authority, which it subsequently relinquished to obtain an HMO license. Four other provider-sponsored MCOs obtained an HMO license after the demonstration solicitation was released, and one operated under the license of a subsidiary.

Independence Blue Cross is the only demonstration MCO that is not sponsored by a provider system. It offers Medicare supplemental insurance products and a commercial PPO product and

owns an HMO that offers commercial HMO products, a Medicare HMO product, and a Medicare POS product. Independence was hoping that the PPO product it offered under the demonstration would attract beneficiaries who disliked the network restrictions of its HMO and POS Medicare options but wanted a less expensive alternative to supplemental coverage.

The 13 demonstration MCOs operated in a variety of markets and faced different market pressures. Yellowstone and Health Alliance, serving small cities and surrounding rural areas, were the only Medicare risk MCOs in their markets when they entered the demonstration. Health Partners targeted its demonstration product to a low-income, inner-city portion of Philadelphia. The other 10 MCOs marketed their products to the general Medicare population of the large urban areas they served. In 1997, they found themselves competing with between 3 and 9 Medicare risk MCOs.

M+C payment rates varied significantly across markets. Four MCOs served markets in which the payment rate in 1999 was at least 20 percent higher than the USPCC, while two (Yellowstone and Health Alliance) served markets in which the payment rate was at least 20 percent below the USPCC.

Benefit Offerings

All of the demonstration MCOs offered only one type of product. When they began operations, seven demonstration MCOs offered traditional HMO products and six offered alternative products. Of the six, four offered POS products (one of which offered a triple-option POS product), one offered a PPO product, and one offered a product we have classified as an exclusive provider organization (EPO) product. One MCO offered two benefit packages (at different premiums) throughout its service area, and another MCO varied its benefit package across two segments of its service area.

In the HMO and POS products, enrollees were required to select a primary care physician (PCP), who was responsible for coordinating their care. In the POS products, enrollees could self-refer for specified services, but they faced higher cost sharing when they did so. The triple-option product had three benefit levels: lowest cost sharing for care coordinated by a PCP, higher cost sharing for self-referrals within the network, and still higher cost sharing for self-referrals outside the network.

Enrollees in the PPO and EPO products were not required to select a PCP. In the PPO product, offered by Independence Blue Cross, enrollees could obtain care outside the network but faced higher cost sharing when they did so. The EPO product was offered by St. Joseph's, which did not have a physician network under contract. Enrollees in this product were covered for ambulatory physician services received from physicians in the MCO's service area who accepted assignment under Medicare, but they had to use physicians who had admitting privileges at a network hospital for inpatient care.

All 13 demonstration MCOs provided additional benefits that are not covered under the FFS Medicare program. Twelve MCOs offered outpatient prescription drug coverage. Each imposed a dollar limit on such coverage that ranged across MCOs from \$500 to \$2,500 per year. Other benefits provided by most MCOs included vision exams, eyeglasses, hearing exams, and hearing aids.

Most MCOs did not change their benefit offerings between their first and second year of operations, and those who did made small changes. However, seven of the eight MCOs still participating in 2000 substantially changed their benefits this year. Most reduced the generosity of their benefit package, but some made it more generous or otherwise restructured it. The key changes were:

- Two MCOs began offering multiple benefit packages.
- Three MCOs instituted or raised premiums.
- Three MCOs increased their copayments for physician office visits, and one reduced its copayment for specialist visits (while continuing to require no copayment for PCP visits).
- Three MCOs increased their copayments for emergency room visits.

The changes in prescription drug benefits were more varied and complex. Two MCOs introduced a three-tiered copayment structure in which the lowest copayment was for generic drugs, a higher copayment was for preferred brand-name drugs, and the highest copayment was for nonpreferred brand-name drugs. Two other MCOs increased their copayments for drugs, one raised its annual limit from \$1,500 to \$1,700, and one reduced its annual limit from \$2,500 to \$2,000 but began applying this limit to brand-name drugs only.

The Implications of Provider Sponsorship

The fact that 12 of the demonstration MCOs were sponsored by providers had important implications for their approach to and experiences under the demonstration. In marketing their demonstration products, most provider-sponsored MCOs differentiated themselves from traditional insurers and HMOs by highlighting their historic local presence in the community, their reputation for quality, and their hospitals' nonprofit status. Physician endorsement or support was also an important component of the marketing campaign for five MCOs.

Provider sponsorship also influenced the product design of some MCOs, their approach to care management, and the distribution of risk among the MCO and network providers. Two provider-sponsored MCOs that withdrew from the demonstration after becoming operational acknowledged that their failure was due in part to poor product design caused by inexperience with managed care and, for one of the two MCOs, attempts to avoid aspects of managed care disliked by providers and patients. More than half of the provider-sponsored MCOs had difficulty with one or more of the following during their first year of operation: establishing positive provider relations, establishing appropriate provider incentives, and changing practice patterns. As several MCOs mentioned, these problems arose in part from the often great differences in philosophy and goals associated with running a provider organization such as a hospital and running an MCO. In addition to the difficulty of building a different type of professional relationship with providers, the provider-sponsored

MCOs could not transfer risk as a traditional HMO would. That is, the risk downstreamed to providers was often still contained within the same provider system that sponsored the MCO.

Encounter Data Submission

All MCOs participating in the demonstration were required to submit encounter data for all Medicare services received by their enrollees -- essentially, all of the information on a Medicare FFS claim. The data submission process has been plagued by significant problems, delaying the application of the HCC payment method and frustrating the MCOs. The MCOs complained that it was difficult to collect some of the information included on the traditional FFS Medicare claim. In addition, some have had trouble providing the data in the proper format and in communicating with the carriers and fiscal intermediaries. Most MCOs have found the encounter data submission process to be very burdensome. As of April 2000, only two MCOs had submitted sufficient quantities of encounter data that could potentially be complete. However, the completeness and accuracy of those data had not been verified.

MCO Financial Experience

Given the substantial start-up costs for a new product, all of the MCOs anticipated losing money in the first several years of operation. However, five MCOs withdrew from the demonstration because their losses were much higher than expected. The other MCOs experienced losses that were closer to expectations. The MCOs attributed the higher-than-expected losses to a variety of factors, including higher-than-expected utilization, low enrollment, and high administrative costs (including the costs of submitting encounter data). In addition, two MCOs acknowledged that poor product design contributed to their financial losses.

Impact of the BBA

Several MCOs cited the administrative burden of the BBA as "enormous" and a "threat to their viability." Also, in making the demonstration MCOs just like other M+C organizations, the BBA essentially "stole the demonstration's thunder." Rather than receiving special attention and support from HCFA, the demonstration MCOs became one of hundreds of MCOs responding to regulation changes and struggling to meet new requirements. In addition, the changes in the way payment rates are calculated under the BBA was less of a boost than what MCOs in low-payment areas expected, and the legislation's budget neutrality provisions meant that increases were minimal in higher payment areas.

· DISENROLLMENT, BIASED SELECTION, AND EFFECTS ON MEDICARE COSTS

Disenrollment

Five percent of demonstration enrollees disenrolled within 3 months after joining their MCO, and 13 percent disenrolled within 12 months. Twelve-month disenrollment rates varied

substantially, ranging from 5 percent at Mount Carmel and Yellowstone to 28 percent at St. Joseph's. On average, the 12-month disenrollment rate in MCOs with a POS product was almost twice as high as in MCOs with no out-of-network coverage (17 percent versus 9 percent). The higher disenrollment among enrollees in a POS product may be a result of not understanding, at the time of enrollment, the limitations on the POS benefit.

Because of differences in methodology, the 12-month disenrollment rates we computed for the demonstration are not directly comparable with those reported in other recent studies (Riley et al. 1997; GAO 1998; Nelson et al. 2000). Using the same methods as used here, Brown et al. (1993) found that 12-month disenrollment rates in Medicare risk MCOs in the late 1980's ranged from 3 percent to 59 percent, with a median of 11 percent. More recent estimates of 3-month disenrollment rates computed by GAO (1998), using the same methods as used here, indicate that the 3-month disenrollment rates among the demonstration MCOs are similar to those experienced by Medicare risk MCOs generally. GAO found that in 1996, 34 percent of risk MCOs had a 3-month disenrollment rate of less than 3 percent, and 56 percent had a 3-month rate of between 3 and 9 percent. Among the 13 demonstration MCOs, 31 percent had a 3-month rate of less than 3 percent, and 69 percent had a 3-month rate of between 3 and 9 percent.

Forty-three percent of disenrollees joined another Medicare MCO within three months of disenrolling. This is much lower than the percentage of disenrollees nationally who switch to another MCO. The relatively small percentage of disenrollees who switched to another MCO is not surprising, since the Medicare managed care penetration rate in some of the demonstration markets was lower than average, and some MCOs designed their product to appeal to beneficiaries who had resisted enrolling in Medicare HMOs.

Beneficiaries disenrolled for a variety of reasons. Twenty-eight percent disenrolled primarily for reasons related to costs or benefits, 21 percent cited problems with providers, 12 percent moved out of the MCO's service area, another 12 percent disenrolled because of various service-related problems, and 9 percent disenrolled because of access problems (9 percent).

Biased Selection

Overall, the demonstration MCOs experienced favorable selection, although to a substantially lesser extent than has been reported previously for Medicare risk HMOs. The fact that 12 of the 13 MCOs were sponsored by provider systems and 6 offered products with at least some out-of-network coverage may have made these MCOs more attractive than Medicare risk HMOs to a more representative mix of enrollees. We assessed the direction and magnitude of biased selection in the demonstration through four measures: (1) prior expenditures, (2) prevalence of high-cost conditions, (3) mortality rates, and (4) self-reported measures of health status. For each measure, we controlled for differences between enrollees and nonenrollees in the demographic risk factors included in the M+C payment mechanism.

After adjusting for differences in demographic risk factors, we found that baseline expenditures for enrollees were 7 percent lower than for nonenrollees (see Table 2). Using the same methods, Hill and Brown (1990) found that prior expenditures for Medicare risk enrollees were 23 percent lower

TABLE 2

MEASURES OF BIASED SELECTION COMPUTED
FROM THE CLAIMS-BASED SAMPLE

	Adjusted Enrollee/Nonenrollee Ratios			
	Prior Expenditures	Percent with Predicted Expenditures More than Twice the National Average	Percent with Predicted Expenditures More than Four Times the National Average	12-Month Mortality Rate
All MCOs	0.93***	0.91***	0.75***	0.72***
PPO/EPO Product	0.93	0.88***	0.58***	0.68***
Independence Blue Cross	0.92**	0.88***	0.56***	0.61***
St. Joseph's	0.94	0.87	0.63*	0.76*
POS Product	1.01	1.07*	0.96	0.86***
Crozer-Keystone	1.05	1.12*	1.02	0.92
Memorial Sisters of Charity	1.01	1.04	1.11	0.77***
People's Health Network	0.95	1.13	0.93	0.92
SCHP	1.02	0.99	0.69	0.85
No Out-of-Network Coverage	0.94	0.88**	0.54***	0.71***
Florida Hospital Healthcare System	0.84***	0.83***	0.71***	0.67***
Health Alliance Medical Plans	0.86***	0.61***	0.56	0.66***
Health Partners	0.86*	0.97	0.65**	0.69***
Mount Carmel Health Plan	0.87***	0.83***	0.63***	0.76***
Ohio Health Alliance	1.02	1.00	1.01	0.79***
UCSD Health Plan	1.16	1.12	0.00	0.82
Yellowstone Community Health Plan	1.03	0.99	0.90	0.78*

NOTE: The enrollee/nonenrollee ratios are adjusted to account for differences between the two groups in the demographic risk factors included in the M+C payment mechanism.

*The difference between enrollees and nonenrollees is significant at the .10 level, two-tailed test.

**The difference between enrollees and nonenrollees is significant at the .05 level, two-tailed test.

***The difference between enrollees and nonenrollees is significant at the .01 level, two-tailed test.

than for nonenrollees. The direction and magnitude of biased selection varied significantly across MCOs and likely reflects differences in product design, market characteristics, sponsorship, and marketing strategy. Based on the adjusted baseline expenditures, all of the MCOs offering POS products had neutral selection, while four of the seven MCOs with no out-of-network coverage had favorable selection. Independence Blue Cross had favorable selection in its PPO product.

We came to a similar conclusion about biased selection when measuring it by the prevalence of high-cost conditions in enrollees versus nonenrollees. We defined beneficiaries with high-cost conditions as those for whom the HCC risk adjuster predicted high future costs based on their diagnoses in the baseline period. After controlling for differences in demographic risk factors, we found that enrollees were nine percent less likely than nonenrollees to have medical conditions in the baseline period that were predictive of costs more than twice the national average. Enrollees were also 25 percent less likely than nonenrollees to have predicted costs more than four times the national average. Thus, the more costly the medical conditions, the less likely was enrollment in a demonstration MCO.

The variation across MCOs in this measure of biased selection was similar, though not identical, to what we found for the analysis of baseline expenditures. The findings confirm that some of MCOs with no out-of-network coverage and Independence Blue Cross experienced favorable selection, while the MCOs with POS products were more likely to experience neutral selection.

Our findings on the mortality rates of enrollees versus nonenrollees also imply that the demonstration MCOs experienced favorable selection. After controlling for differences in demographic risk factors, we found that the mortality rate for enrollees in the one-year follow-up period was 28 percent lower than for nonenrollees. When biased selection was measured by mortality rates, a larger number of MCOs experienced favorable selection than when it was measured by baseline expenditures and the prevalence of high-cost conditions. However, mortality rates capture only one aspect of biased selection, since they provide no information on the health status of beneficiaries who survived. As with the other measures examined, MCOs with POS products experienced less favorable selection with respect to mortality rates than the other MCOs.

The measures of self-reported health status obtained from the survey indicate that the greatest differences between enrollees and nonenrollees are in the prevalence of functional limitations. After controlling for differences in demographic risk factors, we found that enrollees were three to four percentage points less likely than nonenrollees to be limited in their activities of daily living (ADLs) and three to five percentage points less likely to be limited in their instrumental activities of daily living (IADLs). The adjusted estimates indicate that the two groups did not differ with respect to the SF-12 summary measures of physical and mental health, the prevalence of most serious medical conditions, or the percentage who reported that they were in excellent health. However, enrollees were two percentage points less likely than nonenrollees to report that they were in poor health.

The MCO-level comparisons of the prevalence of functional limitations yield conclusions that are similar to those drawn from comparisons of prior expenditures and high-cost conditions. In Independence Blue Cross and in three of the four MCOs with no out-of-network coverage that were included in the survey, the adjusted estimates indicate that enrollees were less likely than

nonenrollees to have ADL or IADL impairments. In the MCOs offering POS products, enrollees did not differ from nonenrollees in the prevalence of functional limitations.

Biased Disenrollment

Disenrollment rates were highest among nonwhites, the under 65 disabled, the oldest old, those on Medicaid, and those with high baseline expenditures. The baseline expenditures of those who disenrolled within a year after joining their MCO were 82 percent higher than the baseline expenditures of those who remained enrolled (\$6,107 versus \$3,356). This suggests that these vulnerable subgroups were less satisfied with their care and/or had a poorer understanding of how to use their MCO.

Effects on Medicare Costs

We estimated the effects of the demonstration on Medicare costs by comparing the capitation payments the MCOs received from HCFA with an estimate of the Medicare expenditures that enrollees would have incurred in the FFS sector. We estimated the latter from regression models estimated on nonenrollees, in which expenditures in the follow-up period (1998) were specified as a function of the HCC risk factor (which is itself a function of age, sex, and baseline diagnoses), baseline expenditures, and a dummy variable identifying persons covered by Medicaid. We used the regression coefficients and the characteristics of enrollees to predict FFS expenditures for enrollees in the follow-up period.

Overall, the capitation payments HCFA made for demonstration enrollees did not differ significantly from the expenditures HCFA would have incurred for those individuals in the FFS sector. In contrast, research has shown that because of favorable selection, capitation payments to Medicare risk HMOs are about six to seven percent more than HCFA would have spent on the enrollees in the FFS sector (Brown et al. 1993; Riley et al. 1996). The effects on Medicare costs varied across MCOs in a manner that is consistent with the findings on biased selection. As a group, the MCOs with no out-of-network coverage received payments that were six percent higher than the expenditures that would have been incurred for their enrollees in the FFS sector, while the MCOs with POS products received payments that were six percent lower than the expenditures that would have been incurred for their enrollees in the FFS sector.

EFFECTS ON ACCESS TO AND SATISFACTION WITH CARE

Overall Effects

Demonstration enrollees and nonenrollees had comparable access to care, after differences between the two groups in beneficiary characteristics were controlled for (see Table 3). The demonstration MCOs had no effect on some access measures, improved access on other measures, and reduced access on still other measures. On most measures for which the MCOs either increased or reduced enrollees' access, the effects were modest.

TABLE 3
ESTIMATED EFFECTS ON SELECTED ACCESS
AND SATISFACTION MEASURES

(Percentages)

Access Measures	Enrollees	Nonenrollees	Difference	P-Value
Medical Tests and Treatment				
Obtained tests and treatment needed				
Always	82.5	80.5	2.0	0.16
Sometimes or never	4.9	4.4	0.5	0.50
Reported Barriers to Specialty, Inpatient, and Home Health Care				
Not able to see a specialist when the beneficiary perceived a need (with negative consequences)	5.7	3.7	2.0	0.02
Not admitted to a hospital when the beneficiary perceived a need (with negative consequences)	0.8	1.8	-1.0	0.04
Discharged from a hospital before ready (among those with a hospital stay) (with negative consequences)	4.4	3.7	0.6	0.60
Needed home health care but did not receive any (with negative consequences)	2.2	0.7	1.4	0.00
Needed more health care than received (among those with any use) (with negative consequences)	9.4	10.6	-1.2	0.62
Appointments for Routine and Urgent Care				
Able to get an appointment for regular or routine care as soon as wanted				
Always	76.4	70.4	6.0	0.00
Sometimes or never	6.8	6.5	0.3	0.75
Able to be seen for an illness or injury as soon as wanted				
Always	71.7	70.9	0.8	0.71
Sometimes or never	12.2	8.4	3.8	0.01

TABLE 3 (continued)

Access Measures	Enrollees	Nonenrollees	Difference	P-Value
Appointments for Routine and Urgent Care (cont'd)				
Wait in doctor's office more than 30 minutes past appointment time				
Never	58.7	42.7	16.0	0.00
Always or usually	13.8	17.1	-3.2	0.01
Access to Selected Types of Care				
Able to get prescription medicine				
Always	89.2	88.7	0.5	0.64
Sometimes or never	5.5	4.8	0.7	0.36
Did not get a prescription filled because unable to pay	8.7	8.2	0.4	0.62
Able to get medical help/advice in the evenings or on weekends				
Always	50.0	53.0	-3.0	0.51
Sometimes or never	36.3	27.8	8.5	0.05
Ease of getting medical help/advice in the evenings or on weekends				
Very easy	28.7	22.5	6.2	0.12
Hard or very hard	21.6	17.4	4.2	0.27
Obtained special medical equipment without investing a lot of time/energy	64.7	76.6	-12.0	0.00
Satisfaction with Care				
Overall quality of care				
Excellent	50.7	42.2	8.5	0.00
Fair or poor	2.3	2.3	0.0	0.97

NOTE: Demonstration effects were estimated from logit models that control for differences between enrollees and nonenrollees. The estimated models were used to generate predicted probabilities for each individual as an enrollee and as a nonenrollee. The difference between the mean of these two predictions is the estimated effect of the demonstration.

Enrollment in the demonstration had no effect on whether beneficiaries received the medical tests and treatment they thought they needed. Over 80 percent of enrollees and nonenrollees were always able to get the tests and treatment they needed, while only 4 to 5 percent of both groups were sometimes or never able to get the tests and treatment or treatment they needed. Enrollees were more likely than nonenrollees to report problems with access to specialty care and home health care but were less likely to report problems with access to inpatient hospital care. However, these differences were relatively small, and the great majority of enrollees and nonenrollees were satisfied with their access to these services.

The greatest positive effects of the demonstration MCOs on access were the 16 percentage point increase in the number of enrollees who reported never waiting more than 30 minutes past their appointment time in a doctor's office and the 6 percentage point increase in the number of enrollees who were always able to get an appointment for regular or routine care as soon as they wanted. The MCOs' greatest negative effect on access was the 12 percentage point reduction in the number of beneficiaries who were able to obtain special medical equipment "without taking a lot of time and energy."

Enrollees were more satisfied with the overall quality of care and with most aspects of care we examined than were nonenrollees. For example, after we controlled for differences in beneficiary characteristics, enrollees were 9 percentage points more likely than nonenrollees to rate the overall quality of their care as excellent (51 percent versus 42 percent). Enrollees were also significantly more satisfied with the thoroughness of their care and with most dimensions of provider effectiveness, including the amount of time physicians spent with them, the clarity of physicians' explanations, and their listening skills.

MCO-Level Effects

Effects on access and satisfaction varied across MCOs. Yellowstone Community Health Plan, which introduced Medicare managed care to Billings, Montana and the surrounding rural areas, had the largest positive effects on access and satisfaction of all the demonstration MCOs. After controlling for differences in beneficiary characteristics, we found that Yellowstone enrollees were 10 percentage points more likely than nonenrollees to always get the tests and treatments they needed (88 percent versus 78 percent) and 27 percent more likely to rate the overall quality of their care as excellent (62 percent versus 35 percent). Health Alliance, which introduced Medicare managed care to small cities and rural communities in Illinois and Indiana, increased beneficiaries' satisfaction with the overall quality of care by 12 percentage points. These findings imply that introducing an organized system of health care into rural areas and small cities for Medicare beneficiaries can contribute to better access to and satisfaction with care.

On most measures, the other MCOs either had no effect on or increased beneficiaries' access to and satisfaction with care. However, two MCOs, Peoples Health Network and SCHP, increased the likelihood that beneficiaries were not able to see a specialist when they thought they needed to and reported negative consequences. This finding is noteworthy because these two MCOs offered POS benefits. Peoples Health Network offered a triple option product, and SCHP offered a very limited POS product with an authorized out-of-network services benefit. The increased barriers to

specialty care reported by enrollees in these two MCOs may reflect an initial misunderstanding by some enrollees of the POS benefits offered.

Effects for Beneficiary Subgroups

In the FFS sector of the demonstration markets, disabled beneficiaries, nonwhites, and those in poor physical and mental health were more likely than other beneficiaries to report access problems and were less satisfied with their care. The effects of the demonstration did not vary much across subgroups, so the pattern observed in the FFS sector persisted in the MCOs.

A substantial percentage of under-65 disabled beneficiaries and those in poor physical and mental health reported problems obtaining prescription drugs, both in FFS Medicare and in the demonstration MCOs. For example, 29 percent of under-65 disabled nonenrollees reported that on at least one occasion, they had not gotten a prescription filled because of an inability to pay, and this percentage was not significantly reduced by enrollment in an MCO. Thus, financial barriers to prescription drugs were a problem for the most vulnerable beneficiaries in the demonstration MCOs as well as in FFS Medicare.

Enrollees' Understanding of their MCOs

Studies have shown that Medicare beneficiaries in the FFS sector often find it difficult to understand the Medicare program. We also found that enrollees in the demonstration often had a poor understanding of their coverage. Twenty-nine percent of enrollees reported knowing little or nothing about how their MCO works and how to get services paid for. Beneficiaries enrolled in MCOs with out-of-network coverage had the poorest understanding of their coverage. Over one-third of such enrollees did not understand that they had access to out-of-network providers, but that they would pay a higher copayment for out-of-network care. These findings point to a potentially serious problem: if beneficiaries do not understand an MCO's rules and procedures, their access can be limited or delayed, and they can be exposed to unexpected out-of-pocket costs.

The lack of understanding about coverage was more prevalent among disenrollees and may have contributed to their decision to disenroll. Also, more vulnerable subgroups such as less educated beneficiaries, minorities, those with a low income, dual eligibles, and those in poor health did not understand the MCO as well as their counterparts. Since an understanding of health care coverage figures prominently into access, our results suggest that beneficiary education will continue to be an important issue for HCFA and for MCOs participating in the Medicare program.

Enrollees' Use of Out-of-Network Services

Nine percent of demonstration enrollees reported that they had received services from a physician outside of their MCO's network. Enrollees in POS and PPO products were not substantially more likely to have gone outside the network for physician services than were enrollees in products with no out-of-network coverage. Among the MCOs that offered out-of-network

coverage, the percentage of enrollees who had gone outside the network for physician services varied from 7 percent to 12 percent. Among MCOs that did not provide out-of-network coverage, the corresponding range was from 8 percent to 10 percent. The relatively low use of out-of-network services by enrollees in PPO or POS products is not surprising, since these MCOs tried to limit the use of such care by restricting the number or types of services that enrollees could receive outside the network or by imposing much higher cost-sharing for out-of-network services.

Overall, 75 percent of the enrollees who used out-of-network services spent less than \$100 out of pocket for these services, but 4 percent reported spending more than \$500. Of those enrollees who went outside their MCO's network, 63 percent did so to receive specialist's services. This was the predominant type of service received outside the network by enrollees in PPO and POS products, and in products with no out-of-network coverage.

CONCLUSIONS

The Medicare Choices Demonstration achieved mixed results and offers some lessons for the M+C program. First, the demonstration experience indicates that PSOs face important challenges in successfully contracting with Medicare. They must deal with their own limited experience with some managed care functions and tackle the inherent conflicts that arise when a provider system attempts to restructure provider incentives and modify practice patterns. The PSOs that were selected for the demonstration were among the most qualified in the nation to contract with Medicare. The fact that so many dropped out of the demonstration suggests that relatively few PSOs are likely to enter M+C in the near future, and those that do may be less successful than HMOs.

On the positive side, the demonstration MCOs attracted a more representative mix of enrollees than has been attracted to Medicare HMOs. This was particularly true of the MCOs offering POS products. Thus, future participation by such MCOs could offer beneficiaries a more meaningful and desirable choice of health plans, which could increase enrollment in M+C. In addition, the demonstration MCOs provided access to care that is comparable to access in the FFS sector, and they increased beneficiaries' satisfaction as well. However, the higher disenrollment rates experienced by MCOs with POS products and beneficiaries' poorer understanding of such products suggest that HCFA will need to devote attention to helping beneficiaries understand these products and to evaluating their effects.

Finally, we were not able to evaluate the effects of new risk adjusters on Medicare program costs or MCO financial performance -- one important goal of the demonstration -- because the MCOs were not able to submit the required encounter data. The problems the MCOs faced in this area underscore the challenge of collecting complete encounter data from MCOs in the future. In response to this situation, HCFA is, under M+C, requiring a more limited set of data elements than were required under the demonstration and is initially using a risk adjuster based on inpatient hospital encounter data only. The demonstration suggests that HCFA should anticipate substantial challenges and delays in moving to a more complete encounter data system.

I. INTRODUCTION

The Medicare Choices Demonstration was launched by the Health Care Financing Administration (HCFA) to test both innovative ways of expanding the kinds of managed care options offered to Medicare beneficiaries and new risk-based payment methods for Medicare managed care. Before January 1999, the vast majority of private health plans that participated in Medicare were authorized under the Medicare risk program. Under the demonstration, some of the requirements governing the risk program were modified to allow an expanded set of health maintenance organizations (HMOs) and new types of organizations, such as provider-sponsored organizations (PSOs) and preferred provider organizations (PPOs) to participate. Part of HCFA's intent in implementing the demonstration was to benefit from some of the managed care innovations developed for privately insured populations. Many of the innovations being tested in the demonstration were subsequently included in the Medicare + Choice (M+C) program enacted under the Balanced Budget Act (BBA) of 1997. The experience under the demonstration is therefore of particular interest.

Thirteen new managed care organizations (MCOs) started operating under the demonstration. The first one started up in February 1997, and the latest one began operating in July 1998. Six MCOs have withdrawn from the demonstration, with most citing large financial losses as the primary reason for doing so. In this final report for the evaluation of the Medicare Choices Demonstration, we describe the characteristics, implementation approaches, and experiences of the 13 demonstration MCOs. We also assess the nature and extent of biased selection in the demonstration, and estimate the effects of the demonstration on Medicare costs, access to care, and beneficiary satisfaction with care.

A. THE MEDICARE CHOICES DEMONSTRATION

1. Background

HCFA did the planning and design work to develop the framework for the Medicare Choices Demonstration in 1994 and early 1995, and the agency released the solicitation announcement in June 1995. At that time, the percentage of Medicare beneficiaries enrolled in managed care was quite low, and Medicare managed care enrollment was heavily concentrated in a few states. In December 1994, 3.1 million beneficiaries, or 8 percent of the Medicare population, were enrolled in Medicare managed care. Seventy-five percent of these beneficiaries were enrolled in risk contracts, about 20 percent were enrolled in health care prepayment plan (HCPP) contracts, and just over 5 percent were enrolled in cost contracts. Fifty-seven percent of all Medicare risk enrollees at that time lived in California and Florida.

Since 1994, enrollment in Medicare managed care has more than doubled, increasing to 6.9 million beneficiaries in April 2000, or 17 percent of the Medicare population. Despite this growth, the percentage of Medicare beneficiaries enrolled in managed care remains far below that of privately insured individuals. The growth in Medicare managed care enrollment has been due almost entirely to enrollment growth in risk contracts.¹ Medicare managed care enrollment has become less geographically concentrated than it was in 1994, with California and Florida now accounting for 37 percent of Medicare risk enrollees.

Policymakers' interest in making managed care available to the Medicare population has been sparked primarily by the expectation that MCOs would provide care more efficiently than fee-for-

¹Enrollment will continue to be heavily concentrated in risk contracts in the future, since the BBA restricted the types of organizations that can hold HCPP contracts and required that the cost contracting option be phased out. All current cost contracts will end on December 31, 2002.

service (FFS) providers, thus creating a mechanism for constraining the growth in Medicare costs. Prior research findings indicate that risk MCOs reduce the use of Medicare-covered services and thus have the *potential* to generate cost savings for Medicare (Brown et al. 1993). However, the best available evidence indicates that the Medicare risk program increased HCFA's costs by about 6 percent because of favorable selection (Brown et al. 1993, Riley et al. 1996, GAO 1997). That is, risk MCOs enroll a mix of beneficiaries that is healthier than average, but this is not fully accounted for by the demographic adjusters included in the adjusted average per capita cost (AAPCC) payment method (the adjusters include age, sex, Medicaid status, and institutional status).²

These findings led HCFA to fund a considerable amount of research to develop new risk adjusters for Medicare managed care. In 2000, HCFA began implementing one of those new risk adjusters, the principal inpatient diagnostic cost group (PIP-DCG) model, on a five-year transition schedule.³ In the PIP-DCG model, payments to MCOs are adjusted on the basis of diagnoses from hospitalization data on enrollees as well as data on selected demographic characteristics.

2. Objectives of the Demonstration

The Medicare Choices Demonstration was implemented to test whether the Medicare risk program could be expanded and enhanced by introducing new types of MCOs and products, and by using new risk-based payment methods. HCFA wanted to assess the extent of beneficiary interest in these new managed care options and to determine whether including such options would

²The AAPCC payment method was used to set payments under the Medicare risk program. In 1998, it was replaced by the M+C payment method, which uses the same demographic adjusters as the AAPCC method.

³In 2000, 10 percent of the payment is based on the PIP-DCG risk adjuster, and 90 percent is based on the demographic adjusters. The PIP-DCG adjuster will be fully implemented in 2004.

significantly increase managed care enrollment levels. The demonstration experience is now of even more interest than initially anticipated because of the subsequent passage of the BBA, through which many of the changes being tested under the demonstration were enacted.

When the demonstration was initiated, participation in the Medicare risk program was limited to federally qualified HMOs and competitive medical plans (CMPs).⁴ Under the demonstration, eligibility to enter into risk-based contracts with HCFA was expanded beyond HMOs and CMPs to organizations legally constituted as PPOs, PSOs, and "other managed care or insurance models consistent with the licensure laws within their states" (HCFA 1995). PSOs encompass a range of organizational models in which physicians, one or more hospitals, and in many cases other providers are linked through various types of contractual arrangements or common ownership. HCFA did not require that MCOs be licensed by their state insurance departments to participate in the demonstration but deferred this decision to the states.

HCFA also expanded the range of organizations eligible to participate in the demonstration by agreeing to waive the 50/50 requirement and the minimum enrollment requirement in effect at the time if the MCO could otherwise assure HCFA that it had adequate beneficiary protections in place.⁵ For example, MCOs seeking a waiver of these requirements had to demonstrate significant experience in providing high-quality care on a risk basis and had to have a comprehensive quality

⁴CMPs are state-licensed HMOs that lack federal qualification but have been certified by HCFA as eligible to participate in the Medicare risk program.

⁵The 50/50 requirement mandated that no more than 50 percent of the total enrollment in an MCO with a Medicare risk contract could consist of Medicare and Medicaid enrollees. The minimum enrollment requirement stated that an MCO must have at least 5,000 enrollees (1,500 for a rural MCO) to be eligible for a Medicare risk contract. The 50/50 requirement has been eliminated under the M+C program, and the minimum enrollment requirement has been significantly relaxed.

assurance (QA) system in place. Other basic eligibility criteria for the demonstration included the ability to provide all Part A and Part B services, assume some financial risk, comply with state laws and regulations, and demonstrate financial solvency. Finally, participating organizations also had to have a well-developed internal QA program.

The solicitation for the demonstration stressed HCFA's interest in introducing new types of managed care products into the Medicare risk market, such as point-of-service (POS) and PPO products.⁶ By giving enrollees the flexibility to obtain some services outside the MCO's network in return for higher cost sharing, such products are expected to appeal to beneficiaries who have been reluctant to enroll in traditional risk plans because of the lock-in requirement. POS and PPO products have become popular in the private sector. In 1995, 45 percent of U.S. workers covered by employer-sponsored health insurance were enrolled in a PPO or POS product, up from 29 percent two years earlier (Jensen et al. 1997).

In the solicitation for the demonstration, HCFA also indicated its willingness to be flexible in considering payment arrangements proposed by MCOs. The key requirement was that MCOs had to accept at least some financial risk. HCFA specifically indicated its interest in testing new risk adjusters and partial risk models.

3. Application Process and Current Status of the Demonstration

MCOs for the Medicare Choices Demonstration were selected in two stages. HCFA released the initial solicitation announcement in June 1995 describing the framework for the demonstration and inviting interested organizations to submit a pre-application form. The agency also indicated

⁶ In October 1995, after the solicitation for Medicare Choices Demonstration was released, HCFA issued guidelines on how HMOs and CMPs could offer POS products under the Medicare risk program.

that preference would be given to applicants in nine metropolitan areas: Atlanta, GA; Columbus, OH; Hartford, CT; Houston, TX; Jacksonville, FL; Louisville, KY; New Orleans, LA; Philadelphia, PA; and Sacramento, CA. These nine areas were targeted because they had little or no Medicare risk enrollment despite having characteristics expected to provide favorable conditions for the growth of Medicare managed care—namely, moderate to high HMO penetration rates in the private sector, a moderate to high number of HMOs, and AAPCC payment rates higher than the United States Per Capita Cost (USPCC). The solicitation indicated that HCFA would consider innovative applications from MCOs in other geographic areas and that it was particularly interested in MCOs whose networks would include rural areas.

Some 372 organizations submitted pre-application forms expressing potential interest in the demonstration. After reviewing these pre-applications, HCFA invited 52 organizations to submit more detailed, second-round applications. In April 1996, HCFA announced that 25 of these organizations had been selected as final candidates for the demonstration. Subsequently, 3 of these organizations decided to participate under the regular Medicare risk program, and 9 others withdrew before becoming operational, leaving 13 in the demonstration. The MCOs that withdrew before becoming operational cited a variety of reasons for their decision. Some concluded after further study that their demonstration proposals were not likely to be successful, some were undergoing corporate reorganizations that made it difficult to devote the necessary resources to the demonstration, and some were reportedly having trouble developing their provider networks.

The 13 MCOs that started operating under the demonstration are located in nine metropolitan areas (see Table I.1). Nine MCOs operate in five of the metropolitan areas that had been targeted for the demonstration (Atlanta, GA; Columbus, OH; Houston, TX; New Orleans, LA; and Philadelphia, PA). Two MCOs, Health Alliance Medical Plans and Yellowstone Community Health

TABLE I.1
THE 13 MCOs IN THE MEDICARE CHOICES DEMONSTRATION

Market/MCO	Date of First Enrollment	Number of Months in the Demonstration ^a	Enrollment After One Year of Operation	Enrollment in April 2000
Atlanta GA				
SCHP	12/1/97	29	2,811	7,346
St. Joseph's	06/1/98	19	3,316	0 ^b
Billings, MT				
Yellowstone Community Health Plan	07/1/97	30	1,595	0 ^c
Champaign-Urbana, IL				
Health Alliance Medical Plans	12/1/97	29	3,865	6,783
Columbus, OH				
Mount Carmel Health Plan	04/1/97	37	6,304	13,180
Ohio Health Alliance	07/1/97	18	5,385	0 ^b
Houston, TX				
Memorial Sisters of Charity	04/1/97	37	5,259	19,030
New Orleans, LA				
Peoples Health Network	09/1/97	32	2,663	11,575
Orlando, FL				
Florida Hospital Healthcare System	02/1/97	23	12,081	0 ^b
Philadelphia, PA				
Crozer-Keystone	04/1/97	33	2,715	0 ^c
Health Partners	05/1/97	36	2,476	5,310
Independence Blue Cross	04/1/97	37	5,136	12,714
San Diego CA				
UCSD Health Plan	07/1/98	22	1,292	3,493

^aAs of April 2000

^bWithdrew from the demonstration as of January 1999.

^cWithdrew from the demonstration as of January 2000.

Plan, were selected because they proposed to serve rural areas, and two others, Florida Hospital Healthcare System and the University of California at San Diego (UCSD) Health Plan, were selected because their proposals were judged as promising and innovative. Five MCOs withdrew from the demonstration because of large financial losses, and the contract of a sixth MCO (SCHP) was terminated for cause effective May 1, 2000. Among the seven still active MCOs, demonstration enrollments in April 2000 varied from approximately 3,500 to over 19,000.

Nine MCOs agreed to have their payments under the demonstration set using the hierarchical coexisting conditions (HCC) risk adjuster. In the HCC model, developed by the same researchers who developed the PIP-DCG model, diagnoses from inpatient and outpatient encounter data are used to adjust payments (Ellis et al. 1996, Pope et al. 1998).⁷ Two MCOs agreed to be paid under the standard AAPCC system, one agreed to receive AAPCC rates in some counties in its service area and a 70/30 blend of the AAPCC and USPCC in counties that had relatively low payment rates, and one MCO agreed to a partial capitation model in which it would receive AAPCC rates for Part B services and a 50/50 blend of AAPCC rates and FFS rates for Part A services. HCFA has not yet been able to implement the HCC model or the partial capitation model because the MCOs have not been able to submit complete encounter data.

In 1998, HCFA replaced the AAPCC payment system with the M+C payment system. Under the new payment method, 1997 AAPCC rates became the starting point for determining county payment rates in 1998 and beyond. The M+C capitation rate for a given county is set at the highest of three amounts:

⁷Eight MCOs agreed to be paid using the prospective HCC model, in which diagnoses in a given year are used to set payments for the following year, and one MCO agreed to be paid using the concurrent HCC model, in which diagnoses in a given year are used to retroactively adjust payments for that year.

1. A blend of local and national rates (the contribution of the national rate was 10 percent in 1998 and increases to 50 percent in 2003 and thereafter)⁸
2. A floor rate, which was \$367 in 1998
2. A two percent increase from the previous year's rate

The floor rate and the local and national components of the blended rate are updated annually by the national growth percentage, which is based on projected per capita Medicare expenditures minus a reduction specified by law. In 1998 and 1999, the rates for all counties were set at either 2 percent above the previous year's rate or at the floor. This outcome was the result of the budget neutrality provision in the BBA and a relatively low national growth percentage for 1998 and 1999. In 2000, 63 percent of all counties have received a blended rate.

All demonstration MCOs were paid under the M+C payment system in 1998 and 1999. In 2000, all demonstration MCOs are receiving interim payments based entirely on the M+C demographic adjusters. The MCOs that agreed to be paid under the HCC model or the partial capitation model will receive retroactive settlements when they have submitted the necessary encounter data. The remaining MCOs will receive retroactive settlements based on the 90/10 blend of the demographic adjusters and PIP-DCG model that is being used to pay M+C MCOs.

B. OBJECTIVES OF AND APPROACH TO THE EVALUATION

HCFA funded the evaluation of the Medicare Choices Demonstration to investigate the characteristics and experiences of the demonstration MCOs and to estimate the effects of the demonstration on beneficiaries and on the Medicare program. The 13 demonstration MCOs vary

⁸In determining blended rates, the national component is adjusted by an index designed to measure geographic variation in health care input prices.

in their history, characteristics, market environment, and approach to the demonstration. We therefore estimated effects separately for each MCO as well as for the entire demonstration. The following are the key questions that we addressed in the evaluation:

- What are the characteristics of the MCOs that participated in the demonstration, how did they implement the demonstration, and what have their experiences been?
- What types of beneficiaries enrolled in the demonstration, and how do they differ from those who remained in FFS Medicare? Did the MCOs experience biased selection?
- What proportion of enrollees disenrolled from the demonstration, and why? How do disenrollees compare with "stayers" with respect to personal characteristics and health status?
- Has the demonstration led to higher or lower costs to Medicare than would have been the case had enrollees remained in FFS Medicare?
- What are the effects of the demonstration MCOs on beneficiary satisfaction with care and access to care?
- How well do demonstration enrollees understand their MCO and the rules for obtaining care?

We used case study methods to investigate the characteristics, implementation approaches, and experiences of the demonstration MCOs. In that analysis, we relied primarily on data collected from two site visits to the MCOs. Findings from the first site visits were presented in Frazer et al. (1999). In this report, we present findings from the second site visits, in which we explored changes in the MCOs' characteristics and approaches to the demonstration as well as their operational experience.

We addressed the other research questions identified above using individual-level data on three study groups: (1) the total enrollee sample, (2) the claims-based sample, and (3) the survey-based sample. The total enrollee sample consists of all beneficiaries who were enrolled in a demonstration MCO on or before December 1, 1998. We used that sample to compute disenrollment rates. The

claims-based sample consists of a subset of the total enrollee sample for whom Medicare claims data were available for a specified baseline period, as well as a FFS comparison group drawn from the MCOs' service areas ("nonenrollees"). We used the claims-based sample to assess the direction and magnitude of biased selection and to estimate the effects of the demonstration on Medicare costs. The survey-based sample is a smaller sample of enrollees and nonenrollees from whom we collected data in a telephone survey. We used the survey data to examine additional measures of biased selection, investigate beneficiaries' reasons for enrollment and disenrollment, explore beneficiaries' understanding of their MCOs, and estimate the effects of the MCOs on access to care and beneficiary satisfaction. To estimate the effects of the demonstration, we used multivariate models to control for exogenous differences between enrollees and nonenrollees.

C. ORGANIZATION OF THIS REPORT

This report consists of six chapters. Chapter II describes the data sources, samples, and analytic methods used in the evaluation. Chapter III provides a discussion of the characteristics, implementation approaches, and experiences of the 13 demonstration MCOs. Chapter IV presents our analysis of enrollment, biased selection, and effects on Medicare costs, while Chapter V presents our analysis of access, quality of care, and beneficiary satisfaction. Chapter VI presents our conclusions.



II. DATA AND METHODOLOGY

We used a variety of data sources in the evaluation of the Medicare Choices Demonstration, including site visit interviews at participating MCOs, Medicare enrollment and claims files, and a beneficiary survey. In this chapter, we describe these data sources and our methods for analyzing them.

A. DATA ON MCO CHARACTERISTICS

Site visits to demonstration MCOs were the primary source of data on the MCOs' characteristics, approaches to implementing the demonstration, and operational experiences. A two-person research team from MPR visited each MCO approximately four months after it began serving demonstration enrollees and all but two of the MCOs approximately one year later. In the initial site visits, the team obtained information on the MCOs' history, characteristics, and approach to implementing the demonstration, while information obtained in the follow-up visits was related to changes in the MCOs' characteristics or approach, and to their demonstration experiences. Two MCOs, Ohio Health Alliance and St. Joseph's, were not visited for a second time because they announced their intention to withdraw from the demonstration before the scheduled visit. We conducted telephone interviews with senior staff members from those two MCOs to investigate their reasons for withdrawing from the demonstration.¹

During each site visit, the MPR research team met with the MCO staff responsible for overall strategy, finance, and operations; clinical practice and quality assurance (QA); marketing; provider

¹We also conducted such interviews with senior staff members from the other three MCOs that withdrew from the demonstration. These three MCOs announced their intention to withdraw from the demonstration after we had conducted our follow-up site visits

relations; and management information systems (MIS). The titles of the people we interviewed varied across MCOs, but they typically included the chief executive officer (CEO), chief financial officer (CFO), medical director, marketing director, and MIS director. We also reviewed relevant documents, such as the original application to participate in the demonstration; quarterly reports submitted to HCFA; and marketing materials, explanation of benefits, provider manuals, and organizational charts. In addition, we contacted MCOs after completing the site visits to resolve data inconsistencies and clarify specific points of discussion.

We also conducted telephone interviews with the carriers and fiscal intermediaries responsible for processing the MCOs' encounter data. These interviews focused on the status of MCOs' encounter data submission activities and on the nature of the problems connected with data submission. We obtained additional information on the encounter data submission process from reports prepared by MEDSTAT for its contract with HCFA to assess the completeness and accuracy of the encounter data, and we spoke personally with the principal authors of those reports.

In addition to collecting data in site visits, we used various HCFA data sources to examine trends in Medicare managed care activity in the demonstration market areas. We used the Geographic Service Area File for September 1997, 1998, and 1999 to examine trends in the number of Medicare risk MCOs operating in those areas, and we used the State/County/Plan Market Penetration File for September 1997, 1998, and 1999 to determine the number of Medicare beneficiaries in each market and to examine trends in Medicare managed care penetration rates. We also used HCFA data to examine the number of risk contract nonrenewals in the demonstration markets for 1999 and 2000.

B. INDIVIDUAL-LEVEL DATA AND SAMPLES

We based our analyses on three study groups: (1) the total enrollee sample, (2) the claims-based sample, and (3) the survey based sample. The *total enrollee sample* consists of all beneficiaries who were enrolled in a demonstration MCO on or before December 1, 1998. We obtained data from Medicare enrollment files on the total enrollee sample, and used this sample to study disenrollment from the demonstration. The *claims-based sample* consists of a subset of the total enrollee sample (as specified below) and a FFS comparison sample ("nonenrollees") for whom we obtained data from Medicare enrollment and claims files. The *survey-based sample* consists of a smaller sample of enrollees and nonenrollees from whom we collected data in a telephone survey. We now describe the claims-based sample and then the survey-based sample.

1. Claims-Based Sample

a. Sample Design

We selected the claims-based enrollee sample from the population of beneficiaries who were enrolled in a demonstration MCO at any time between the MCO's start date and December 1998. We defined the baseline period for each MCO as the calendar year prior to the year in which the MCO began serving demonstration enrollees. Thus, we defined the baseline period as 1996 for the 11 MCOs that began serving demonstration enrollees in 1997 and as 1997 for the 2 MCOs (St. Joseph's and UCSD) that began serving demonstration enrollees in 1998. We defined the follow-up period for the analysis of demonstration effects on Medicare costs as calendar year 1998.

To ensure that we had complete baseline claims data for each enrollee sample member, we restricted the sample to individuals who were covered by Medicare as of the start of their MCO's baseline period and were not enrolled in a Medicare managed care plan at any time during the

baseline period.² We also restricted the sample to beneficiaries who were continuously enrolled in Medicare Part A and Part B from the start of the baseline period through the end of the follow-up period and to beneficiaries for whom Medicare was the primary payer during this period.³ In addition, we excluded beneficiaries entitled to Medicare on the basis of having end-stage renal disease (ESRD) because such beneficiaries constitute a very small proportion of the Medicare population and have higher-than-average Medicare costs. To include them could have distorted our results.

Starting from the 78,673 beneficiaries who were enrolled in the demonstration on or before December 1, 1998, these selection criteria yielded a sample of 44,768 enrollees (see Table II.1). Thus, nearly 34,000 enrollees (or 43 percent) were excluded from the final sample. These exclusions resulted almost entirely from the criteria we imposed to ensure that we had complete FFS Medicare claims data for the sample during the baseline period. Over 18,000 enrollees were excluded from the sample because they were not continuously enrolled in Part A and Part B from the start of the baseline period through the end of the follow-up period.⁴ Approximately 15,000 enrollees were excluded because they had been enrolled in Medicare managed care at some point during the baseline period. Although most of our analyses were conducted on the 44,768 enrollees in the final sample, we also used the initial sample of 78,673 enrollees to examine the percentage of enrollees

²We required baseline claims data to construct measures of prior Medicare expenditures and diagnoses, which we used to measure biased selection and as control variables in various analyses.

³For beneficiaries who died prior to the end of 1998, these criteria were applied to the portion of 1998 in which they were alive.

⁴The vast majority of these individuals were excluded because they became eligible for Medicare after the start of the baseline period. Fewer than 1 percent were excluded because they did not have coverage for both Part A and Part B or because of interruptions in Part A or Part B coverage.

TABLE II.1
SELECTION OF ENROLLEE CLAIMS-BASED SAMPLE

	Number	Percent
Beneficiaries Enrolled in the Demonstration on or before December 1, 1998	78,673	100.0
Enrollees Excluded from the Claims-Based Sample		
Not continuously enrolled in Part A and Part B from start of baseline period through December 1998 ^a	18,192	23.1
Enrolled in Medicare managed care during baseline period	14,717	18.7
Medicare is not primary payer	923	1.2
Entitled to Medicare because of ESRD	73	0.1
Enrollees in the Claims-Based Sample	44,768	56.9

NOTE: The figures in this table give the number of enrollees who were excluded from the claims-based sample as a result of applying the exclusion criteria in the order listed. Some enrollees were excluded on the basis of several criteria. The largest number of such cases (961) was excluded on the basis of the first two criteria listed.

^aFor beneficiaries who died before December 1998, we required continuous enrollment in Part A and Part B until the time of death.

in each MCO who enrolled in the demonstration relatively soon after becoming eligible for Medicare and the percentage who were previously enrolled in Medicare managed care.

We selected a nonenrollee sample for each MCO from beneficiaries in the MCO's service area who were alive and enrolled in FFS Medicare as of the MCO's start date. We restricted the nonenrollee sample for each MCO to individuals who were covered by Medicare as of the start of the baseline period and who were not enrolled in a Medicare managed care plan at any time from the start of the baseline period through the end of the follow-up period. We also restricted the nonenrollee sample to beneficiaries who were continuously enrolled in both Part A and Part B during this period, those for whom Medicare was the primary payer, and those who were not entitled to Medicare because of ESRD.

For metropolitan areas with two or more demonstration MCOs (Atlanta, Columbus, and Philadelphia), we selected a separate nonenrollee sample for each MCO rather than a nonenrollee sample for the entire metropolitan area. We did this because the MCOs in these areas differ in their demonstration service areas. For example, SCHP served 4 counties in the Atlanta metropolitan area, while St. Joseph's served 30 counties encompassing Atlanta and more rural portions of the state.

We also used an additional eligibility criterion for selecting the nonenrollee sample to avoid introducing an artificial difference between enrollees and nonenrollees in mortality rates. Nonenrollees who satisfied the selection criteria specified above were at risk of dying at any time after the start date of the corresponding MCO. However, because enrollees were alive when they enrolled, they were at risk of dying only after their particular enrollment date. Failing to account for this difference in selecting the nonenrollee sample would have biased our results toward a higher mortality rate for nonenrollees. To address this problem, we selected an oversized sample of nonenrollees and randomly assigned each individual a "pseudo-enrollment" date such that the

distribution of the assigned dates matched the distribution of actual enrollment dates of enrollees in the corresponding MCO. Only those beneficiaries who were alive as of their pseudo-enrollment date were eligible for the nonenrollee sample. We have used this approach in other studies of Medicare managed care (Brown 1987, Hill and Brown 1990).

From the population of nonenrollees who satisfied these selection criteria, we selected a nonenrollee sample for each MCO such that its distribution by county of residence matched the corresponding distribution for enrollees. We selected a nonenrollee sample that was approximately twice as large as the enrollee sample. Table II.2 presents the sample sizes and minimum detectable differences for comparisons of enrollees to nonenrollees on variables expressed as percentages and baseline Medicare expenditures. For the entire sample, the minimum detectable difference for a percentage for which the true value for enrollees is 20 percent is 0.7 percentage points (for a two-tailed test at the .05 significance level with 80 percent power). The minimum detectable difference for a comparison of baseline Medicare expenditures for the entire sample is 4.7 percent of mean expenditures for nonenrollees.

b. Medicare Enrollment and Claims Files

We used the Medicare Enrollment Database (EDB) to select the samples of enrollees and nonenrollees. We identified enrollees from the group health plan indicators on the EDB, which indicate the MCO in which a person is enrolled, the enrollment date, and the disenrollment date (if applicable). We also used the EDB as our source of data on such beneficiary characteristics as age, sex, race, state and county of residence, Medicaid buy-in status, and reason for entitlement to Medicare, and to identify sample members who died during the follow-up period. The EDB does not include data on institutional status, which is one of the demographic adjusters used in setting

TABLE II.2

SIZE OF THE CLAIMS-BASED SAMPLE AND MINIMUM DETECTABLE
DIFFERENCES FOR COMPARISONS OF ENROLLEES WITH NONENROLLEES

MCO	Sample Size		Minimum Detectable Difference for Comparison of Percentage with a Mean of:		Minimum Detectable Difference for Comparison of Mean Expenditures ^a
	Enrollees	Nonenrollees	p = 50	p = 20 or 80	
All MCOs	44,768	90,139	0.9	0.7	4.7
PPO/EPO Product	7,335	15,000	2.6	2.0	13.0
Independence Blue Cross	5,353	11,025	2.7	2.1	13.5
St. Joseph's	1,982	3,975	4.5	3.4	22.3
POS Product	11,713	23,561	2.0	1.6	10.1
People's Health Network	1,939	3,918	4.5	3.5	22.5
Crozer-Keystone	2,040	4,082	4.4	3.4	22.0
Memorial Sisters of Charity	5,676	11,417	2.6	2.1	13.2
SCHP	2,058	4,144	4.4	3.4	21.9
No Out-of-Network Coverage	25,720	51,578	2.7	2.2	13.7
Florida Hospital Healthcare System	7,127	14,283	2.4	1.9	11.8
Health Alliance Medical Plans	2,964	5,994	3.6	2.8	18.2
Health Partners	1,973	3,924	4.5	3.5	22.4
Mount Carmel Health Plan	6,817	13,687	2.4	1.9	12.0
Ohio Health Alliance	5,159	10,335	2.8	2.2	13.8
Yellowstone Community Health Plan	1,544	3,081	5.0	3.9	25.3
UCSD Health Plan	136	274	16.7	11.6	85.1

NOTE: Minimum detectable differences (MDDs) are for two-tailed tests at the .05 significance level and 80 percent power. For the comparisons of MCOs classified by product type, the MDDs assume that each MCO is weighted equally within each product type.

^aMDDs for the comparison of mean expenditures are expressed as a percentage of the mean expenditure for nonenrollees.

payments to M+C MCOs. We obtained data on the institutional status of enrollees from the Group Health Plan (GHP) File. For nonenrollees, individual-level data on institutional status are not available, but we obtained county-level data from HCFA on the distribution of nonenrollees across AAPCC rate cells (including institutional status).⁵

We obtained Medicare FFS claims data on enrollees for the baseline period and on nonenrollees for the baseline and follow-up periods. We obtained data from the Standard Analytic Files for all types of claims except Part B physician/supplier and DME--these we obtained from the 100 percent National Claims History File. We had hoped that encounter data submitted by the demonstration MCOs would be available for the analysis. However, as we discuss in Chapter III, the encounter data submission process has been plagued with difficulties, and no MCO submitted complete encounter data in time to be included in our analysis.

2. Survey-Based Sample

We conducted a telephone survey of a sample of enrollees and nonenrollees to collect data on a variety of topics, including reasons for enrolling in (and disenrolling from) the demonstration MCOs, enrollees' understanding of how to use their MCOs, satisfaction with care, access to care, use of out-of-network services, health and functional status, attitudes toward health care, and demographic and socioeconomic characteristics. The survey-based sample is not a subset of the claims-based sample, because we did not want to restrict the survey-based sample to beneficiaries who were continuously enrolled in FFS Medicare throughout the baseline period. Thus, the survey-based sample is more representative of the total enrollee population than is the claims-based sample. We derived many of the questions on access and satisfaction from the Medicare Consumer Assessment of Health Plans Survey (CAHPS). However, we developed additional questions on

⁵These county-level data are required by HCFA for computing payments to M+C MCOs.

access and satisfaction (see Chapter V). The survey was conducted through the use of computer-assisted telephone interviewing (CATI).

a. MCOs in the Survey

Ten of the 13 MCOs that participated in the demonstration were included in the survey. We excluded three MCOs—Florida Hospital Healthcare System, Ohio Health Alliance, and St. Joseph's—because they announced their intention to withdraw from the demonstration before we conducted the survey, and we were concerned that this announcement would have influenced enrollees' responses. Three of the MCOs in the survey—Crozer-Keystone, Yellowstone, and SCHP—withdrawed from the demonstration after the survey was conducted.

Because UCSD Health Plan became operational much later than the others, we conducted the survey twice: for the first nine MCOs from December 3, 1998 through May 13, 1999, and for UCSD December 7, 1999 through February 14, 2000.⁶

Some demonstration MCOs were required to participate in the Health Outcomes Survey (HOS) and/or in Medicare CAHPS during the year in which we fielded the evaluation survey. HOS and CAHPS are annual surveys of Medicare managed care enrollees sponsored by HCFA. HOS samples 1,000 enrollees per MCO each year, while CAHPS samples 600 enrollees per MCO each year. Five demonstration MCOs were included in CAHPS when we fielded our evaluation survey, and three were included in HOS.⁷ For these MCOs, we did not include enrollees in our sample who had been

⁶If St. Joseph's had not withdrawn from the demonstration, we would have collected data from the MCO when we did so for UCSD, since they became operational at approximately the same time.

⁷Crozer-Keystone, Independence Blue Cross, and Memorial Sisters of Charity were included in both CAHPS and HOS in the year in which we began fielding the evaluation survey. Health Partners and UCSD were included in CAHPS only. The year in which MCOs had to begin participating in these two surveys depended on when their contracts with HCFA were signed.

selected for the HOS and CAHPS samples because of the similarity between the survey questionnaires. In excluding enrollees who had been sampled for HOS and CAHPS, we preserved the probability structure and self-weighting characteristics of the evaluation survey (see Appendix A).

b. Sample Design

For the nine MCOs in the first wave of the survey, the *enrollee* target population comprised beneficiaries who were continuously enrolled in a demonstration MCO for at least two months during the period from August 1997 through July 1998.⁸ For UCSD, the corresponding period was specified as July 1998 (which is when the MCO started serving enrollees) through July 1999.⁹ The enrollee population thus included beneficiaries who were still enrolled in a demonstration MCO as of July 1998 (July 1999 for UCSD) as well as those who had disenrolled after two or more months of experience in the MCO. The *nonenrollee* population consisted of Medicare beneficiaries living in the counties served by the demonstration MCOs and covered by Medicare for at least two months as of the sampling date (July 1998 for the first nine MCOs) but not enrolled in any Medicare MCO from August 1997 through July 1998 (July 1998 through July 1999 for UCSD).

The enrollee and nonenrollee target population was further restricted to beneficiaries with both Part A and Part B Medicare coverage and those for whom Medicare was the primary payer. We excluded beneficiaries who were eligible for Medicare because they have ESRD. We also excluded sample members who died between the time of sample selection and the interview.

⁸Beneficiaries who were enrolled in a plan for only one month as of the sampling date were excluded because they were unlikely to have had enough experience with the plan to answer questions about their access to and satisfaction with care.

⁹We extended the sampling period for UCSD by a month because it had a very low enrollee population.

We used the Medicare EDB to construct the sampling frame for enrollees and nonenrollees and selected both samples using Chromy's (1979) sequential sample selection procedure, as described in Appendix A. This procedure allowed us to implicitly allocate both samples to zip codes within MCOs such that the distribution for both samples reflected the distribution of the enrollee population by zip code. Matching the nonenrollee sample to the distribution of the enrollee population by zip code ensured that service environment and regional variations in practice patterns were the same for enrollees and nonenrollees. Three of the MCOs in the survey were located in Philadelphia, and the other seven were located in seven other metropolitan areas. Because the three Philadelphia MCOs had very different service areas, we selected a separate nonenrollee sample for each.

A total of 5,656 enrollees and 5,656 nonenrollees were selected for the survey sample (see Table II.3). We selected an equal number of enrollees and nonenrollees per MCO to maximize the precision of enrollee-nonenrollee comparisons at the MCO level. We selected 526 enrollees and an equal number of nonenrollees from seven of the MCOs. For the three largest MCOs, we selected 658 enrollees and an equal number of nonenrollees in order to reduce design effects for analyses that combine observations across MCOs.

The vast majority (98 percent) of enrollees selected for the survey were eligible to participate (see Appendix Table B.1). The main reason for ineligibility was death following sample selection but before being contacted for the interview. Eighty-nine percent of nonenrollees selected for the survey were eligible to participate. Two-thirds of nonenrollee eligibles were classified as such because they enrolled in a Medicare MCO after sample selection but before being contacted for an interview, and just under one-third died after sample selection.

TABLE II.3
ENROLLEE AND NONENROLLEE FRAME AND SAMPLE
SIZES FOR 10 MCOs IN THE SURVEY

MCO/MCO	Date Began Serving Enrollees	Enrollee Frame Size ^a	Enrollee Sample Size	Nonenrollee Frame Size	Nonenrollee Sample Size
Atlanta, GA					
SCHP	12/1/97	1,411	526	117,967	526
Billings, Montana					
Yellowstone Health Plan	7/1/97	1,464	526	19,052	526
Champaign-Urbana, IL					
Health Alliance	12/1/97	2,142	526	158,699	526
Columbus, OH					
Mt. Carmel	4/1/97	6,900	658	115,503	658
Houston, TX					
Memorial Sisters of Charity	4/1/97	6,470	658	296,469	658
New Orleans, LA					
Peoples Health Network	9/1/97	2,041	526	93,507	526
Philadelphia, PA					
Crozer-Keystone	4/1/97	3,062	526	110,069	526
Health Partners ^b	5/1/97	2,667	526	134,358	526
Independence Blue Cross	4/1/97	6,468	658	323,983	658
San Diego, CA					
UCSD	7/1/98	1,183	526	91,869	526

^aThese figures represent the total enrollee sample frame before individuals selected for CAHPS and the Health Outcomes Survey were excluded.

^bDuring the field period, an additional 122 enrollees and 122 nonenrollees were released from a reserve sample for Health Partners, bringing the total sample size to 648 enrollees and 648 nonenrollees. We released this reserve sample because the low response rates achieved for Health Partners were resulting in fewer completed interviews than anticipated.

c. Response Rates

The overall response rate for the survey was 65 percent for enrollees and 57 percent for nonenrollees (see Table II.4). Response rates varied considerably across MCOs. Health Partners in Philadelphia had the lowest response rates (49 percent for enrollees and 45 percent for nonenrollees). This was expected, since residents of low-income, inner city neighborhoods are more difficult to locate by telephone. Health Alliance in Champaign-Urbana, Illinois had the highest response rates (77 percent and 68 percent).

Nonenrollees had a lower response rate than enrollees because of a higher refusal rate (17 percent for nonenrollees versus 14 percent for enrollees) and because we were unable to find telephone numbers for a higher percentage of nonenrollees (17 percent versus 12 percent) (see Appendix Table B.2). The lower refusal rate among enrollees is probably due to the fact that the survey was more salient to beneficiaries who had recently joined a new MCO. It is also likely that we were more successful in locating enrollees by telephone because, compared with nonenrollees, their address information was, on average, more current, having recently enrolled in an MCO.

Among enrollees and nonenrollees, survey respondents were less likely than nonrespondents to be under age 65 and disabled, age 85 and over, black, covered by Medicaid, and originally entitled to Medicare due to disability (see Table II.5). These differences suggest that respondents were in better health and needed fewer services on average than nonrespondents, which implies that our estimates may understate the extent to which enrollees and nonenrollees faced access problems. More important, to the extent that the response bias differs for enrollees and nonenrollees, our comparisons of these two groups could be biased. We took two steps to minimize this risk. First,

TABLE II.4
SURVEY SAMPLE SIZES AND RESPONSE RATES

MCO	Number of Completed Interviews		Response Rates	
	Enrollees	Nonenrollees	Enrollees	Nonenrollees
All MCOs	3,661	2,716	65.3	56.7
PPO Product				
Independence Blue Cross	358	273	56.3	52.1
POS Product				
People's Health Network	355	271	70.3	61.1
Crozer-Keystone	328	217	65.5	50.4
Memorial Sisters of Charity	383	307	60.1	56.5
SCHP	377	253	73.4	55.4
No Out-of-Network Coverage				
Health Alliance	400	280	76.6	68.2
Health Partners	298	205	49.3	44.8
Mount Carmel	453	353	70.6	62.2
UCSD	339	268	65.3	58.4
Yellowstone	370	289	71.4	60.8

TABLE II.5
COMPARISON OF RESPONDENTS WITH NONRESPONDENTS

	Enrollees		Nonenrollees	
	Respondents	Non-respondents	Respondents	Non-respondents
Age				
< 65(disabled)	9.2	12.1***	11.2	15.8***
65-74	53.5	46.9	44.8	39.1
75-84	30.8	31.8	32.8	32.6
≥ 85	6.5	9.2	11.2	12.5
Race				
White	77.5	70.9***	81.3	70.5***
Black	19.3	21.6	16.0	24.4
Other	3.2	7.5	2.7	5.1
Percent Female	61.0	56.4***	59.6	59.9
Percent Medicaid Buy-in	9.4	16.3***	11.9	18.8***
Percent currently 65 or over who were originally entitled to Medicare because of a disability	8.2	10.1**	5.7	7.0*

*Difference between respondents and nonrespondents is significant at the .10 level, two-tailed test.

**Difference between respondents and nonrespondents is significant at the 0.5 level, two-tailed test

***Difference between respondents and nonrespondents is significant at the .01 level, two-tailed test.

as discussed in Appendix A, we adjusted the sampling weights to compensate for nonresponse.¹⁰ Second, in our comparisons of enrollees and nonenrollees on outcomes such as access and satisfaction, we used logit models to control for differences between the two groups in terms of socioeconomic characteristics, health and functional status, and attitudes toward health care.

The response rate for this survey is comparable to that of other recent telephone surveys of Medicare beneficiaries but substantially lower than comparable surveys conducted 10 years ago.¹¹ For example, MPR's 1996 national survey of Medicare risk enrollees conducted for the Physician Payment Review Commissions achieved a 64 percent response rate. The decline in response rates is a result of a decreasing ability to reach Medicare beneficiaries by telephone. Like the general population, Medicare beneficiaries are inundated with telemarketing calls and requests for charitable donations. Many have responded by obtaining unlisted numbers. Technology such as answering machines, caller i.d., and call block have made it easier to screen telephone calls.

d. Weighting

To simplify and unify our estimation procedures, we produced analysis weights for all sampled enrollees and nonenrollees that accounted for the sample design and for nonresponse, and that controlled for the differing distributions of nonenrollees by zip code area.¹² Using the three steps listed below for each group, we weighted enrollees and nonenrollees separately:

¹⁰We used a weighting class adjustment in which weighting classes were defined on the basis of age and gender.

¹¹For example, MPR's 1990 survey for the evaluation of the Medicare risk program obtained an 82 percent response rate for enrollees and a 73 percent response rate for the FFS comparison group.

¹² The principles underlying the weight development procedures are fully discussed by Cox (1989, 1991).

- To reflect selection probabilities based on the underlying sampling design, we constructed sampling weights.
- We calculated nonresponse-adjusted weights by adjusting the sampling weights to compensate for nonresponse for the screener and for the interview.
- We made a standardization adjustment to the nonresponse-adjusted weights to align their weight sums with the zip code distribution of the enrollee population.

Procedures for producing analysis weights for enrollees and nonenrollees are documented in Appendix A.

e. Statistical Precision

With the survey data, we can be confident about detecting relatively small differences between enrollees and nonenrollees for the entire sample but at the MCO level, we can be confident about detecting only more moderate differences. For the entire sample, the minimum detectable difference for a percentage with a mean value of 20 or 80 percent is 3.5 percentage points (for a two-tailed test at the .05 significance level and 80 percent power) (see Table II.6). However, for MCO-specific comparisons, the minimum detectable differences are in the range of 9 to 11 percentage points, depending on the MCO. For the entire enrollee sample, the 95 percent confidence interval for a percentage with a mean value of 20 or 80 percent is ± 1.4 percentage points. The 95 percent confidence intervals for individual MCOs are approximately ± 4 percentage points.

C. METHODS

Most of the analyses documented in this report involve comparisons of enrollees to nonenrollees in which multivariate models or other methods were used to control for differences between the two groups. However, we also conducted analyses in which means or percentages were computed for

TABLE II.6
PRECISION OF THE SURVEY SAMPLE

MCO	Sample Size		Minimum Detectable Difference for a Percentage with a Mean of:		Half-Length of 95-Percent Confidence Intervals for a Percentage with a Mean of:	
	Enrollees	Nonenrollees	p=50	p=20 or 80	p=50	p=20 or 80
All MCOs	3,661	2,716	4.6	3.5	1.8	1.4
PPO Product						
Independence Blue Cross	358	273	13.3	9.5	5.3	4.3
POS Product						
People's Health Network	355	271	13.4	9.6	5.4	4.3
Croyzer-Keystone	328	217	14.9	10.5	5.8	4.6
Memorial Sisters of Charity	383	307	12.5	9.1	5.1	4.1
SCHP	377	253	13.9	10.0	5.4	4.3
No Out-of-Network Coverage						
Health Alliance	400	280	12.9	9.3	5.1	4.0
Health Partners	298	205	14.9	10.5	5.8	4.7
Mount Carmel	453	353	11.8	8.6	4.8	3.8
UCSD	339	268	13.6	9.7	4.4	5.5
Yellowstone Community Health Plan	370	289	13.0	9.4	5.3	4.2

NOTE: Minimum detectable differences are for two-tailed tests at the .05 significance level, with 80 percent power.

variables that are relevant only to the enrollee sample (for example, the percentage of enrollees who used out-of-network services).

1. Estimation Procedures

We used three statistical methods for comparisons of enrollees to nonenrollees: (1) a "rate cell" approach for measuring biased selection, in which the prior expenditures of enrollees and nonenrollees were compared after adjusting for differences between the two groups in their distribution across AAPCC rate cells; (2) logit models; and (3) linear regression models. With each of these methods, we obtained estimates for the entire demonstration as well as estimates for each MCO. We conducted formal hypothesis tests to determine whether demonstration effects (or measures of biased selection) are significantly different from zero. Two-tailed tests were conducted at the .10 significance level.

a. Rate Cell Approach

We measured biased selection using a rate cell approach previously used by Eggers and Prihoda (1982), Brown (1988), and Hill and Brown (1990). We proceeded as follows:

1. The mean of the Part A and Part B AAPCC demographic cost factors for enrollees and nonenrollees was computed for each county in each MCO's service area.¹³
2. The ratio of the enrollee to nonenrollee mean Part A and Part B demographic cost factors was computed for each county.
3. The mean Part A and Part B expenditures for nonenrollees in each county was multiplied by the relative cost factors computed in step 2.

¹³The demographic cost factor for a given rate cell is an estimate of the mean Medicare expenditure for beneficiaries in that cell to the overall mean expenditure for all beneficiaries. Separate cost factors have been developed for Part A and Part B.

4. The mean adjusted Part A and Part B expenditure for nonenrollees was computed as the weighted mean of the county-level means computed in step 3, where the weights reflect the distribution of enrollees across counties.

Data on institutional status is not available for nonenrollees, so we constructed a set of demographic cost factors for nonenrollees based only on their age, sex, and Medicaid status. To do this, we computed weighted averages of the AAPCC risk factors for institutionalized and noninstitutionalized people, using data we obtained from HCFA on the number of FFS beneficiaries in each rate cell in each county [see Hill and Brown (1990) for details].

b. Logit Models

Many of the outcome variables of interest in this project can be specified as binary (0/1) variables, such as an indicator of whether an individual experienced a particular type of access problem. To estimate the effects of the demonstration MCOs on outcomes expressed as binary variables, we estimated logit models that contained both a set of independent variables measuring beneficiaries' characteristics and an enrollment dummy variable equal to 1 for enrollees and 0 for nonenrollees. Using the estimated coefficients of the logit model, we obtained the predicted value of the dependent variable under two assumptions--first, that all sample members were enrolled in an MCO (that is, the enrollment dummy was set equal to 1 for everyone) and second, that all sample members were in FFS Medicare (the enrollment dummy was set to 0 for everyone). The difference in the mean predicted values provided an estimate of the effects of the demonstration MCOs. We used the p-value on the enrollment dummy variable in the logit model as an indicator of whether the effect was statistically significant.

c. Least Squares Regression Models

For continuous dependent variables, such as Medicare expenditures, we estimated ordinary least squares regression models. For example, to estimate the effects of the demonstration on Medicare program costs, we estimated linear regression models on the nonenrollee sample, in which the independent variables included the HCC risk factor (which is a function of age, sex, and baseline diagnoses), baseline expenditures, and a dummy variable identifying persons covered by Medicaid. We then used the estimated regression coefficients to predict FFS expenditures for enrollees in the follow-up period, which we compared with the capitation payments made by HCFA.

2. Models of Access and Satisfaction

Many of the survey questions on access and satisfaction have five-point response scales (from poor to excellent) or four-point response scales (always, usually, sometimes, never). To estimate effects on outcomes related to such questions, we specified two logit models for each question: (1) a model in which the dependent variable was equal to 1 if the highest response was given and 0 otherwise, and (2) a model in which the dependent variable was equal to 1 if one of the two lowest responses was given and 0 otherwise.¹⁴ By estimating two such models for each underlying access or satisfaction measure, we were able to determine not only whether the MCOs affected the percentage of beneficiaries with the highest levels of access and satisfaction but also whether they affected the percentage with the lowest levels of access and satisfaction.

¹⁴For most measures, we combined the two lowest responses (such as fair/poor) because a very small percentage of the sample gave the lowest response.

3. Subgroup Estimates

To investigate whether and how the effects of the demonstration MCOs varied with the characteristics of beneficiaries, we estimated effects for beneficiary subgroups defined on the basis of such characteristics as age, race, gender, Medicaid buy-in status, and health status. We estimated effects for subgroups by including additional control variables formed by interacting the enrollment dummy variable with the variable defining the subgroup. We tested whether demonstration effects were significantly different from zero for each subgroup.¹⁵

In the analysis of the claims-based sample, we also estimated effects for MCOs classified by the type of product they offered. We defined three types of products: (1) PPO and EPO products, in which out-of-network coverage is offered and a gatekeeper is not required; (2) POS products, in which out-of-network coverage is offered and that require a gatekeeper; and (3) products with no out-of-network coverage. In estimating effects by type of product, we weighted the observations such that each MCO within a product type was weighted equally. This was done to prevent the results for a particular product type from being dominated by MCOs with the largest enrollment. We did not estimate effects by type of product in our analysis of the survey data because the smaller number of MCOs in that analysis meant that there was a relatively small number of MCOs in each category. Thus, we would have had less confidence that the estimates for a particular type of product were associated with that product rather than other MCO characteristics. In analyzing the survey data, we focused on estimating effects for the entire demonstration and for individual MCOs.

¹⁵We did so by testing the statistical significance of the sum of the coefficients on the enrollment dummy variable and the relevant interaction term. For the omitted (reference) subgroups, this is a test of the significance of the coefficient on the enrollment dummy variable.

4. Control Variables

In all of our multivariate analyses of the survey data, we used the same set of independent variables, including (1) demographic and socioeconomic characteristics, (2) health and functional status, and (3) attitudes toward health care. Table II.7 identifies the independent variables we included along with their means for enrollees and nonenrollees.

TABLE II.7

MEANS OF INDEPENDENT VARIABLES IN THE
MULTIVARIATE ANALYSIS OF SURVEY DATA
(Percentages, Unless Otherwise Noted)

Variable	Enrollees	Nonenrollees
Demographic and Socioeconomic Characteristics		
Younger than 65 (disabled)	9.1	11.4
65-74 Years	72.2	62.2
Female	59.9	59.9
Nonwhite	20.0	18.4
Hispanic	4.6	2.8
Education (years)	11.6	11.9
Lives alone	31.1	32.0
Nursing home resident	1.1	4.3
Income less than \$10,000	18.5	17.5
Income greater than \$10,000 and less than \$20,000	29.2	23.1
Medicaid buy-in	8.9	11.5
Health and Functional Status		
SF-12 physical component summary	42.7	41.6
SF-12 mental component summary	53.0	52.5
Number of ADL limitations	0.4	0.6
Number of IADL limitations	0.3	0.5
History of heart disease	27.2	27.9
History of cancer	14.2	15.4
History of stroke	10.2	11.8
History of diabetes	18.8	15.6
History of emphysema, asthma, or COPD	13.3	13.7
Attitudes toward Health Care		
Avoids doctors	27.4	26.2
Worries about health	25.2	25.8

ADL = Activities of daily living
IADL = Instrumental activities of daily living
COPD = Chronic obstructive pulmonary disease



III. CHARACTERISTICS AND EXPERIENCES OF THE DEMONSTRATION MCOs

The 13 Medicare Choices Demonstration MCOs vary across a range of characteristics, including their sponsorship, structure, the extent and type of managed care experience they bring to the demonstration, and the types of markets they serve. They also vary in terms of how they operate, including product design, business and marketing strategies, provider network structure and payment methodology, quality assurance procedures, and utilization management techniques. This chapter describes the characteristics and operational experience of the demonstration MCOs, drawing primarily on our two site visits to each MCO, one after 4 months and another after 16 months of operation.¹ We begin by discussing the themes common to the MCOs' experience in the demonstration. We then describe the MCOs' background, benefit packages, marketing strategy, provider network, quality assurance and utilization management methods, encounter data submission experience, and financial performance. We conclude by discussing the decision by six MCOs to withdraw from the demonstration.

A. COMMON THEMES

The experience of the MCOs seems to be most significantly influenced by three factors: the costs associated with starting an MCO and ongoing administrative costs, the origins of most demonstration MCOs in a provider organization and the preferences and limitations of this provider-focused orientation, and the impact of the BBA.

¹Two MCOs, Ohio Health Alliance and St. Joseph's, announced their intention to withdraw from the demonstration prior to 16 months of operation. We visited each of these MCOs only once.

Start-up costs are important because 7 of the 13 demonstration MCOs obtained a license or formed alliances specifically to participate in the demonstration, and only 1 of these 7 MCOs offered a product other than the demonstration product (UCSD Health Plan also offers a Medicaid product). Four of the 7 newly founded MCOs subsequently withdrew from the demonstration, and of all 6 MCOs that withdrew, only Yellowstone Community Health Plan offered an additional HMO product. All of the MCOs' start-up costs as well as their ongoing administrative expenses were borne by the Medicare enrollment, as the organizations usually did not expand to serve additional populations partly out of a fear of disrupting relationships between other HMOs and the sponsoring provider system.

The weight of the administrative burden was greater than expected because many of the MCOs had lower enrollment in their demonstration product than anticipated, with one MCO only reaching 17 percent of projected enrollment. Three of the withdrawing MCOs did not meet their enrollment targets, and five MCOs (two of which subsequently withdrew) mentioned enrollment as a key factor in short-term financial viability.

Twelve of the demonstration MCOs were sponsored by provider systems. This fact influenced their product design, their approach to care management, and the distribution of risk between the MCO and network providers. All of the withdrawing MCOs were sponsored by provider systems. Two withdrawing MCOs specifically mentioned failures in product design caused by inexperience with managed care (Ohio Health Alliance) and attempts to avoid aspects of managed care disliked by providers and patients (St. Joseph's) as primary reasons for exiting the demonstration. More than half of the demonstration MCOs had difficulty with one or more of the following during their first year of operation: establishing positive provider relations, aligning provider incentives, and changing practice patterns. As several MCOs mentioned, these difficulties arose in part from the often great

differences in philosophy and goals associated with running a provider organization such as a hospital and running an MCO. (Four of the seven MCOs citing these concerns later dropped out of the demonstration.) In addition to the difficulties in building a different type of professional relationship with providers, the provider-sponsored MCOs could not transfer risk as a traditional HMO would. That is, the risk downstreamed to providers was often still contained within the same provider system that sponsored the MCO.

Several MCOs cited the administrative burden of the BBA as "enormous and a threat to their viability." However, the similarity of BBA provisions to the demonstration rules was also a problem. In making the demonstration MCOs just like other M+C organizations, the BBA essentially "stole the demonstration's thunder." Rather than receiving special attention and support from HCFA, the demonstration MCOs became one of hundreds of MCOs responding to regulation changes and struggling to meet new requirements. In addition, the changes in the way payment rates are calculated under the BBA was less of a boost than MCOs in low-payment areas were expecting, and the legislation's budget neutrality provisions meant increases were minimal in higher payment areas.

B. MCO CHARACTERISTICS AND EXPERIENCE

1. Background and History

All of the demonstration MCOs except Independence Blue Cross are (or were until very recently) sponsored by provider systems (see Table III.1).² These MCOs had varying degrees of managed care experience, which most obtained by accepting "downstream" risk from HMOs. Three

²One of the provider-sponsored MCOs has since been bought by an insurer. In February 2000, Humana announced that it had completed its acquisition of Memorial Sisters of Charity Health Network.

TABLE III.1

OVERVIEW OF THE 13 MCOs IN THE MEDICARE CHOICES DEMONSTRATION

Market/MCO	Key Sponsorship Characteristics	Licensure	Previous Risk Experience
Atlanta, GA			
SCHP	Not-for-profit, wholly owned subsidiary of Georgia Baptist Healthcare System. Georgia Baptist created SCHP specifically to meet state insurance department requirements for participation in the demonstration.	Obtained state provider-sponsored health care corporation (PSHCC) license in August 1997 ^a	Sponsoring provider system accepted downstream commercial risk.
St. Joseph's Care Management Corporation	Not-for-profit, wholly owned subsidiary of St. Joseph's Health System. The health system created the subsidiary specifically to meet state insurance department requirements for participation in the demonstration.	Obtained state provider-sponsored health care corporation (PSHCC) license in 1996 ^a	None
Billings, MT			
Yellowstone Community Health Plan	Not-for-profit HMO owned by St. Vincent Hospital and Health Center	Became Montana's first licensed HMO in 1994	Offered commercial and Medicaid products
Champaign-Urbana, IL			
Health Alliance Medical Plans	For-profit HMO owned by the Carle Clinic Association	Licensed to sell health and accident insurance since 1989 (including HMO, PPO, and POS products)	Offered commercial HMO, PPO, and POS products

TABLE III.1 (continued)

Market/MCO	Key Sponsorship Characteristics	Licensure	Previous Risk Experience
Columbus, OH			
Mount Carmel Health Plan	For-profit subsidiary of the Mount Carmel Health System. The health system created Mount Carmel Health Plan specifically to meet state requirements for participation in the demonstration.	Obtained HMO license in December 1996	Sponsoring provider system accepted downstream commercial and Medicare risk
Ohio Health Alliance	Not-for-profit alliance formed specifically for the demonstration by two health systems, the Ohio Health Corporation and Ohio State University Health Care System	HMO license held by the Ohio Health Group (OHG), a partially owned subsidiary of the Ohio Health Corporation	OHG offered commercial HMO and PPO products.
Houston, TX			
Memorial Sisters of Charity	Not-for-profit HMO sponsored by a joint venture between two hospital systems: Memorial Health Care System and Sisters of Charity of the Incarnate Word Health System	Obtained HMO license in December 1995	Offered commercial and Medicaid products. Sponsoring systems accepted downstream Medicare risk from other MCOs.
New Orleans, LA			
People's Health Network	Not-for-profit management services organization owned by Tenet Health System. Provides managed care administrative services to network of 6 Tenet Hospitals and IPAs. HMO license obtained specifically to meet state requirements for participation in the demonstration.	To satisfy state requirements for participation in the demonstration, Tenet created a wholly owned subsidiary, Tenet Choices, Inc., which obtained an HMO license.	Accepted downstream risk for commercial and Medicare lives

TABLE III.1 (continued)

Market/MCO	Key Sponsorship Characteristics	Licensure	Previous Risk Experience
Orlando, FL			
Florida Hospital Healthcare System	Not-for-profit PSO sponsored by Florida Hospital, which is owned by Adventist Health System/Sunbelt, Inc.	No license. Not required to obtain a license by the state of Florida.	Accepted downstream commercial and Medicare risk
Philadelphia, PA			
Crozer-Keystone	Not-for-profit provider system. Health Plans of Pennsylvania (HPP), a wholly owned, for-profit subsidiary of the provider system administers the demonstration product.	HPP obtained HMO license in May 1997	Accepted downstream risk for commercial and Medicare lives
44 Health Partners	Not-for-profit HMO sponsored by a group of 7 teaching hospitals.	Obtained HMO license in 1994 to participate in state Medicaid managed care program	Offered a Medicaid product. Prior to obtaining an HMO license, accepted downstream risk for Medicaid enrollees.
Independence Blue Cross	Not-for-profit insurer offering a range of indemnity and managed care products to the commercial and Medicare populations	Licensed to sell health insurance products including HMO, PPO, and POS. HMO license is held by wholly owned subsidiary Keystone Health Plan East.	Offered commercial indemnity, HMO, and PPO products, and a Medicaid HMO product. Offered a Medicare risk product and Medicare supplemental plans.

TABLE III.1 (continued)

Market/MCO	Key Sponsorship Characteristics	Licensure	Previous Risk Experience
San Diego			
UCSD Health Plan	Not-for-profit HMO sponsored by the Regents of the University of California, San Diego. HMO license obtained to meet state requirements for participation in the demonstration.	Obtained Knox-Keene license in December 1997	Accepted downstream risk for commercial and Medicare lives as a PSO

*PSHCC licensure is available to not-for-profit PSOs in Georgia. It has lower reserve requirements than HMO licensure.

of the provider-sponsored MCOs had HMO licenses when the solicitation for the demonstration was released in June 1995. Five other provider-sponsored MCOs had obtained an HMO license (or operated under a subsidiary's license) by the time they began participating in the demonstration, and a sixth MCO obtained an HMO license subsequently. However, only five of the provider-sponsored MCOs offered any product other than the demonstration product. Thus, while nine of the provider-sponsored MCOs have HMO licenses (either directly or through a subsidiary), four did not use those licenses for any product lines except the demonstration.³

Four provider-sponsored MCOs were permitted by their state to participate in the demonstration without an HMO license. Florida Hospital Healthcare System was permitted to participate without any type of license as a risk-bearing entity. The two participants in Georgia, SCHP and St. Joseph's, satisfied that state's licensure requirements by obtaining a provider-sponsored health care corporation (PSHCC) license. This type of license allows nonprofit PSOs in Georgia to accept financial risk and has lower reserve requirements than an HMO license. Crozer-Keystone satisfied Pennsylvania's requirements for participation in the demonstration by obtaining a risk-assuming PPO certificate of authority, which it subsequently relinquished to obtain an HMO license.⁴

The three provider-sponsored MCOs that had HMO licenses when the solicitation for the demonstration was released had different reasons for not previously participating in the Medicare risk program. Health Partners, which is owned by seven teaching hospitals, served Medicaid beneficiaries in Philadelphia's inner city neighborhoods under a full-risk contract with the state, but

³Three MCOs were required by their state to have an HMO license for the demonstration.

⁴Crozer-Keystone replaced its PPO certificate with an HMO license in order to both capitate providers and use a PCP-gatekeeper model. Under the PPO certificate, the MCO had to choose just one of those options. The HMO license also gives the MCO the ability to serve the Medicaid population, although as of January 2000 it had not entered this market.

it had too few commercial enrollees to satisfy the 50/50 requirement.⁵ Yellowstone Community Health Plan, owned by Montana's largest tertiary care hospital, operated a commercial HMO business in the Billings area, but it did not satisfy the minimum enrollment requirement for a Medicare risk contract. Health Alliance, owned by the Carle Clinic Association, operated a commercial HMO business in central Illinois and Indiana and was eligible to participate in the Medicare risk program. However, it had not done so because it considered the AAPCC payment rates in its service area too low. It was attracted to the demonstration because of HCFA's willingness to consider alternative payment arrangements.

Independence Blue Cross (IBC) is the only demonstration MCO that was not sponsored by a provider system. It is a major not-for-profit insurer in the Philadelphia metropolitan indemnity and managed care markets. IBC offers commercial HMO products and Medicare supplemental products. It also owns Keystone Health Plan East, which offers commercial HMO products, a traditional Medicare risk product, and a Medicare POS product. IBC was hoping that the PPO product it offered under the demonstration would attract beneficiaries who disliked the network restrictions of its HMO and POS Medicare options but wanted a less expensive alternative to supplemental coverage.

2. Reasons for Participating in the Demonstration

a. Provider-Sponsored MCOs

All 12 provider-sponsored MCOs applied to participate in the demonstration because Medicare is a major source of revenue for their provider systems and because they expect managed care to play an increasingly prominent role in the Medicare program. Thus, they saw the demonstration as a

⁵All of Health Partners' commercial enrollees were its own employees.

vehicle for maintaining or increasing their Medicare market share. While the provider systems of eight of the MCOs had contracts with Medicare HMOs prior to the demonstration and continued to maintain many of those contracts, executives of seven of these eight MCOs specifically indicated that direct contracting with Medicare on a risk basis was preferable. As they explained it, they preferred direct contracting because it allowed them to maintain more control over care management than they would have if they contracted with Medicare HMOs. In the words of one MCO executive, direct contracting would eliminate the “middle man.” However, despite this interest in direct Medicare contracting, three provider-sponsored MCOs stressed the importance of not disrupting their parent systems’ current commercial contract relationships with existing HMOs and therefore had no intention of pursuing direct contracting for commercial business.⁶

Health Alliance Medical Plans was also attracted to the demonstration because it represented an opportunity to receive a higher payment rate than the MCO would have received under a traditional Medicare risk contract. The MCO proposed to HCFA that it be paid a blend of the AAPCC and the USPCC under the demonstration in counties in its proposed service area with relatively low AAPCC rates. HCFA agreed to a payment arrangement in which Health Alliance was to receive a 70/30 blend of the AAPCC and USPCC in part of its service area and standard AAPCC rates in the rest of its service area.⁷

⁶UCSD Health Plan, Health Partners, and Florida Hospital Healthcare System

⁷Now that the M+C payment system has replaced the AAPCC system, the payment to Health Alliance Medical Plans in counties where it was to have received the blended rate is the higher of the M+C floor rate and a 30/70 blend of the USPCC and the M+C rate for that county before the floor provision is applied.

Provider-sponsored MCOs also cited national recognition and the desire to improve the health status of their communities through better coordination of care as reasons for participating in the demonstration.

All the MCOs owned by or affiliated with a provider organization believed that their relationships with their sponsoring provider systems would contribute substantially to their overall success and distinguish them in important ways from traditional Medicare HMOs. According to the MCOs, the key advantages of provider sponsorship include the financial backing of the sponsoring provider system, the strong reputation of the parent health system for providing high quality care, a local presence in the community, and up-front support or "buy-in" from providers. Initially, a few MCOs did not overtly emphasize their relationship with their provider sponsors. However, these MCOs later revised their marketing strategy to capitalize on this relationship.

b. Independence Blue Cross

Independence Blue Cross (IBC), the sole demonstration MCO not sponsored by a provider system, joined the demonstration in order to contract with Medicare on a risk basis as a PPO. It saw the demonstration as an opportunity to add a PPO to its complement of Medicare products, which include supplemental plans and traditional HMO and POS products. IBC priced its PPO demonstration product between its zero-premium Medicare HMO product and the monthly premium charged for its most popular Medicare supplemental policy (standard option C). It believed that its competitive advantage was the design of its Medicare Choices product--a large network and open access provisions--combined with the array of other products it offers to Medicare beneficiaries.

3. Market Environment

a. Market Characteristics

The 13 demonstration MCOs operate in nine metropolitan statistical areas (MSAs): Atlanta, GA; Billings, MT; Champaign-Urbana, IL; Columbus, OH; Houston, TX; New Orleans, LA; Orlando, FL; Philadelphia, PA; and San Diego, CA. The MCOs' service areas range in size from a portion of one county (UCSD Health Plan) to as many as 33 counties (Memorial Sisters of Charity) (see Table III.2). Three MCOs--St. Joseph's, Health Alliance Medical Plans, and Memorial Sisters of Charity--have large service areas that include both an MSA and surrounding counties that include rural areas. Most of the MCOs serve large urban areas, but two MCOs (Yellowstone Community Health Plan and Health Alliance Medical Plans) serve small cities and surrounding rural areas. Health Partners' service area consists of a low-income, inner-city portion of Philadelphia.

The Medicare population in the demonstration areas ranged from roughly 24,000 beneficiaries in the service area of Yellowstone Community Health Plan to almost 600,000 in the five counties served by IBC in the Philadelphia area. The Philadelphia MCOs receive the highest M+C payment rates. Health Partners, which serves only Philadelphia county, had an M+C payment rate of \$733 in 1999. In comparison, Yellowstone and Health Alliance had average payment rates just slightly higher than the 1999 floor payment rate of \$380.

All of the MCOs saw the Medicare managed care penetration rate in their service areas increase between 1997 and 1999. Although the markets served by Yellowstone and Health Alliance (Billings, Montana and Champaign-Urbana, Illinois) had the lowest penetration rate, they also had the greatest percentage increase in penetration. Much of this growth is directly attributable to the demonstration. When they began operations, Yellowstone and Health Alliance were the only Medicare MCOs in their markets; since 1997, another risk MCO has entered the Champaign-Urbana

TABLE III.2
CHARACTERISTICS OF THE SERVICE AREAS
OF THE MEDICARE CHOICES DEMONSTRATION MCOs

MCO*	1999 Medicare Population	1999 M+C Payment Rate ^b	Ratio of M+C Rate to 1999 USPCC	Medicare Risk Penetration Rate		Number of Medicare Risk MCOs ^c	
				9/97	9/99	9/97	9/99
Atlanta, GA							
SCHP (4)*	167,454	\$560.00	1.16	6.1	15.9	4	7
St. Joseph's (30)*	410,850	521.86	1.08	4.8	12.3	4	7
Billings, MT							
Yellowstone Community Health Plan (4)*	23,912	380.56	0.79	2.0	10.6	1	1
Champaign-Urbana, IL							
Health Alliance Medical Plans (21)	206,691	389.48	0.80	0.2	3.5	1	2
Columbus, OH							
Mount Carmel Health Plan (6)	180,834	474.59	0.98	10.6	18.0	4	5
Ohio Health Alliance (5)*	172,686	461.77	0.95	10.6	18.1	4	5
Houston, TX							
Memorial Sisters of Charity (33)	574,914	568.77	1.18	18.6	24.4	10	8 ^d
New Orleans, LA							
Peoples Health Network (4)	159,197	653.35	1.35	21.7	30.2	7	7
Orlando, FL							
Florida Hospital Health care System (3)*	167,812	538.70	1.11	33.7	38.8	9	7

TABLE III.2 (continued)

MCO ^a	1999 Medicare Population	1999 M+C Payment Rate ^b	Ratio of M+C Rate to 1999 USPCC	Medicare Risk Penetration Rate		Number of Medicare Risk MCOs ^c	
				9/97	9/99	9/97	9/99
Philadelphia, PA							
Crozer-Keystone (1)*	93,275	613.96	1.27	29.0	36.4	5	6
Health Partners (1)	247,535	732.70	1.51	29.0	36.6	5	6
Independence Blue Cross (5)	598,541	631.73	1.31	29.5	37.1	5	8
San Diego, CA							
UCSD Health Plan (1)	348,001	538.09	1.11	46.8	48.4	9	7

*MCOs that withdrew from the demonstration as of April 2000.

^aThe number in parentheses next to each MCO is the number of counties in the MCO's service area.

^bThe 1999 M+C payment rate is weighted by the demonstration MCO's enrollment in the county as of September 1999. For the two MCOs that withdrew from the demonstration at the end of 1998, the 1999 M+C rate is weighted by the county enrollment as of September 1998.

^cThe calculation of the Medicare risk penetration rate and the number of Medicare risk HMOs includes the Medicare Choices Demonstration MCOs. All other demonstrations, cost MCOs, and HCCPs are excluded from these calculations.

^dIn September 1999, there were 10 M+C contracts serving counties within Memorial Sisters of Charity's 33 county service area. However, two of those contracts were held by the same MCO, and two were offered by MCOs that had been recently purchased by the same national MCO company.

market, but no other Medicare MCOs have entered the Billings market. The Atlanta and Columbus markets also saw considerable growth in Medicare managed care penetration. The market served by the UCSD Health Plan had the highest penetration at both points of observation, with between 47 and 48 percent of Medicare beneficiaries enrolled in a Medicare MCO.

b. Changes in the Managed Care and Provider Markets

In most demonstration markets, the number of MCOs participating in the Medicare risk program increased between 1997 and 1999 (see Table III.2). However, in Orlando, San Diego, and Houston, mergers between MCOs and withdrawals from the Medicare managed care program reduced the number of MCOs serving those markets.

Five MCOs reported that competing MCOs in their markets changed the products they offered in order to gain greater market share. Health Alliance Medical Plans reported that a rival MCO had entered the Medicare managed care market offering a zero premium product to compete with the demonstration MCO's \$25 product. Demonstration MCOs serving Columbus, Philadelphia, and Orlando reported that pharmacy benefits offered in those markets had become more generous. In Orlando, Florida Hospital Healthcare System reported that prescription drug coverage maximums had increased to between \$1,500 and \$2,000, levels the MCO felt were "unsustainable." The MCO in Orlando and those serving Columbus and Houston noted that there were more POS or "open access" products available in those markets than at the time of the first site visit.

Four MCOs reported recent or upcoming changes in state legislation or regulation affecting the managed care industry. Provisions related to patient protections and prior authorization were noteworthy legislative issues in Atlanta, Columbus, and Houston. In Georgia, one MCO felt that these issues and other managed care provisions created an "anti-managed care atmosphere," which

led the MCO to curtail its plans to obtain an HMO license and begin offering a commercial product in the Atlanta market.⁸

Eight demonstration MCOs also expressed concern about the impact of the BBA.⁹ Three commented on the severe administrative burden imposed by the reforms, and one noted that the speed with which the legislation was enacted was especially problematic as it did not give MCOs enough time to fully educate providers on new encounter data reporting requirements. The demonstration MCOs also expressed concern about the user fee to cover the costs of HCFA's consumer education efforts, the phase-in of risk adjustment (for demonstration MCOs not already slated to participate in full risk-adjustment), payment rate increases that lag behind rising medical inflation, and changes in POS provisions.¹⁰ Many MCOs participating in the M+C program have expressed these concerns. We did not identify any concerns that were unique to the demonstration MCOs.

Eight of the MCOs also described changes in their provider markets. In Champaign, there were new mergers between area hospital systems, and in Philadelphia and New Orleans, existing hospital alliances or systems broke up or were sold. The MCOs expected that these changes could have both negative and positive effects on demonstration participants. For example, officials with Crozer-

⁸Both demonstration MCOs in Georgia are licensed as provider sponsored health care corporations (PSHCC). SCHP had agreed to only offer a Medicare product under its PSHCC license and to seek an HMO license if it chose to offer a commercial product.

⁹All BBA provisions apply fully to demonstration MCOs. Demonstration MCOs that agreed to test risk adjustment methodologies will begin following the M+C risk adjustment schedule in 2000, although the methodology will be the one agreed to under their demonstration contract.

¹⁰Under BBA regulations, MCOs can no longer allow members to self-refer to in-network physicians. Under the new point-of-service (POS) guidelines, MCOs can only allow members to bypass a primary care gatekeeper to see providers who are not part of their Medicare provider network.

Keystone in Philadelphia were anxious about the impact of the bankruptcy and sale of a provider-owned hospital system on beneficiaries' willingness to trust a provider-sponsored MCO like itself.

But on the "upside," Peoples Health Network in New Orleans reported that the MCO's sponsor, Tenet, was forming new partnerships with nonprofit hospitals that had been part of New Orleans' strong not-for-profit hospital alliance. Hospital relationships in the New Orleans market are shifting with the break-up of this alliance. Other changes affecting hospitals in the demonstration markets include shifts in managed care pressures. For example, Florida Hospital Healthcare System reported that the hospitals in the Orlando market were feeling more pressure as a result of area HMOs' recent financial losses. To remain viable, the HMOs found it necessary to "squeeze" providers, which, in turn, increased the financial strain on hospitals.

In addition to these hospital-related changes, physician organization was changing in the demonstration markets largely in response to managed care. The trend was toward more organization and integration. For example, Yellowstone Community Health Plan reported that by the second site visit, all but a few primary care practices in the Billings area had been purchased by one of two competing hospital systems, one of which also owns Yellowstone. As a result of this shift, although Yellowstone capitulated its primary care physicians, none of the financial risk was transferred outside of the sponsoring provider system.

c. Expanding the Markets Served

Eight MCOs indicated they had applied for or were considering applying for service area expansions, and two MCOs, Yellowstone and UCSD, were granted expansions. Although the two granted expansions did not extend the MCO's service area to include a new county, they allowed the MCO to serve all or a greater portion of a county in which it already operated. MCOs applying for or considering service area expansions were hoping to further their mission by serving more rural

communities or to lock in referral patterns and market share from a broader geographic area. All of the MCOs who had applied for or intended to apply for an expansion pushed back their timetable for completing the process for two reasons. First, they wanted to solidify operations in their core service area before expanding, and they also found the process of contracting with providers and applying for a service area expansion more complicated than anticipated. Several of the MCOs who had begun or completed the application process were surprised by its difficulty and resource-intensive nature. (See Section D on provider networks for additional discussion of issues surrounding service area expansions.)

4. Changes in MCO Structure, Organization, and Philosophy

Several of the MCOs experienced changes in management or ownership, or in the management of the sponsoring provider system. Health Alliance underwent a corporate reorganization, and three other MCOs (Health Partners, Mount Carmel Health Plan, and Peoples Health Network) got a new CEO within the first year of operation under the demonstration. Health Alliance reorganized its corporate structure in response to changes in information technology, which in turn had changed how departments in the company interrelate. Three of the five senior positions (chief medical officer, chief operating officer, and vice president for marketing and development) were vacant at the time of our second site visit.

For Mount Carmel and Peoples Health Network, the change in CEO came because the former CEO moved into a new position within the sponsoring provider system. This change was not unexpected, and Peoples Health Network had planned to bring in a new CEO after demonstration operations were underway. For Health Partners, the change in CEO was a response to a need for leadership with more managed care experience, especially given the significant losses in the

organization's Medicaid product. To further shore up its managed care expertise, the MCO also hired less senior professionals with managed care experience.

Three MCOs also experienced changes in ownership or significant changes in the management of their sponsoring organizations. In 1998, a proposed joint venture between Yellowstone Community Health Plan and Blue Cross/Blue Shield of Montana was approved, and as a result, Yellowstone became a for-profit company owned by two nonprofits.¹¹ The UCSD School of Medicine hired a new dean. His predecessor had been a driving force behind the creation of the UCSD Health Plan. That change in leadership resulted in a decline in the organizational support for the MCO. Finally, one of the seven non-profit hospital owners of Health Partners went bankrupt and was bought by a for-profit hospital management company. It was unclear how this change in ownership would affect the dynamics of the MCO.

All the MCOs to which we returned for a second round of visits indicated that the demonstration was still an important part of their strategy, but several expressed concern about uncertainties in the program and/or reported plans to reduce the growth of the demonstration product. Four MCOs reported that they had revised down their growth projections or were interested in better controlling the growth of the product in the next year.¹² The decision was based on their experience in the demonstration (primarily financial losses) and the desire to see how recent and expected changes in the Medicare+Choice program would affect their operations.

¹¹Yellowstone, which had hoped to use Blue Cross/Blue Shield's large statewide provider network to expand the demonstration product, withdrew from the demonstration at the end of 1999 before it could do so.

¹²Two of these MCOs subsequently withdrew from the demonstration.

C. BENEFIT OFFERINGS

The 13 demonstration MCOs offered a range of products: 7 offered traditional HMO products,¹³ 3 offered POS products, 1 offered a PPO product, 1 offered a triple-option product, and 1 offered an unconventional product that we call an exclusive provider organization (EPO).¹⁴ The MCOs developed these products on basis of the following considerations: (1) their experience with managed care and with managing risk, (2) their knowledge of Medicare beneficiaries' service needs and receptiveness to different types of managed care, (3) the strengths of their delivery system, and (4) their market environment, including beneficiaries' and providers' experience with managed care, contracting ease, competitors' product structure, and payment arrangements.

In this section, we describe the benefits and key cost-sharing requirements of the products as originally offered (identified as Year One)¹⁵ as well as any changes made to those products in the second year of operation (Year Two). Finally, we describe the benefits and cost-sharing requirements of products offered in 2000 by the MCOs still participating in the demonstration.

1. Benefits in Year One

In Year One, eight MCOs offered one benefit package with no premium, and four charged a premium ranging between \$20 and \$80 (Table III.3). Only one MCO, Ohio Health Alliance, offered more than one benefit package to the same service area. It did not charge a premium for its "Silver"

¹³We use the term traditional HMO product to refer to a product in which enrollees do not have coverage for services received outside the network, except for emergencies and urgently needed out-of-area care. Some MCOs without HMO licenses offer such products under the demonstration.

¹⁴EPOs are similar to PPOs in their organization but enrollees are covered only for services received from participating providers (Kongstvedt 1998).

¹⁵The calendar year may differ for the products offered by different MCOs in each benefit year. For example, Florida Hospital Healthcare System (FHHS) began operations in February 1997, and UCSD Health Plan began in July 1998. Therefore, Year One is 1997 for FHHS and 1998 for UCSD.

benefit package but charged a premium of \$15 for its "Gold" package, which had more generous prescription drug coverage.¹⁶ The MCOs offering a zero premium package did so to stay competitive with other Medicare risk MCOs. However, many MCOs noted that they would have liked to have charged a premium to defray costs or to better target beneficiaries in the market, and that they could have justified a premium given their ACR calculations.

All of the benefit packages included a greater breadth of coverage than beneficiaries receive through the traditional fee-for-service Medicare program (without supplemental Medigap coverage). The packages are similar to those offered by traditional Medicare risk MCOs and often included enhanced coverage for Medicare-covered benefits such as physician office visits, inpatient care, and skilled nursing facility (SNF) care. For example, all demonstration plans covered an unlimited number of inpatient hospital days with no patient cost sharing (Table III.3). All also covered at least 100 days of SNF care per benefit period with no patient cost sharing in-network.

Prescription drug coverage is considered to be one of the most important benefits for attracting beneficiaries to an MCO and one of the most market sensitive. Health Alliance, the only MCO that did not offer prescription drug coverage, made that decision because it felt that payment rates in its service area would not support the benefit. The rest of the MCOs limited the benefit with an annual cap ranging from \$500 to \$2500 (Table III.4) and required a copayment that ranged from \$5 to \$25 based on brand-name or formulary status.

¹⁶St. Joseph's offered a benefit package to the 15 counties in the southern portion of its service area that included prescription drug coverage, while the package offered to the northern counties did not. However both products have a premium of \$20.

TABLE III.3
BENEFITS AND COST SHARING FOR SELECTED MEDICARE SERVICES,
YEAR 1

Market/MCO	Product Type	Monthly Premium	Gatekeeper	Physician Office Visits	SNF Services	Emergency Room ^a
Atlanta, GA						
SCHP ^b	POS	\$0	Yes	\$10 copay	Covered in full up to 100 days per benefit period	\$50 copay
St. Joseph's	EPO	\$20	No	\$10 copay	Covered in full up to 100 days per benefit period	\$25 copay
Billings, MT						
Yellowstone Community Health Plan	HMO	\$40	Yes	\$10 copay	Covered in full up to 150 days per benefit period	\$50 copay
Champaign, IL						
Health Alliance Medical Plans	HMO	\$25	Yes	\$5 PCP copay, \$15 specialist copay	Covered in full up to 100 days per benefit period	\$50 copay
Columbus, OH						
Mount Carmel Health Plan	HMO	\$0	Yes	\$5 copay	Covered in full for unlimited days	\$25 copay
Ohio Health Alliance						
Silver Product	HMO	\$0	Yes	\$5 PCP copay, \$10 specialist copay	Covered in full up to 100 days per benefit period	\$50 copay
Gold Product	HMO	\$15	Yes	\$5 PCP copay, \$10 specialist copay	Covered in full up to 100 days per benefit period	\$50 copay
Houston, TX						
Memorial Sisters of Charity ^b	POS	\$0	Yes	\$5 PCP copay, \$10 specialist copay	Covered in full, up to 100 days per benefit period	\$40 copay
New Orleans, LA						
Peoples Health Network	Triple Option	\$0	Yes	\$5 copay	Covered in full, up to 100 days per benefit period	\$50 copay

TABLE III.3 (continued)

Market/MCO	Product Type	Monthly Premium	Gatekeeper	Physician Office Visits	SNF Services	Emergency Room ^a
Orlando, FL						
Florida Hospital Healthcare System	HMO	\$0	Yes	\$5 copay	Covered in full up to 100 days per benefit period	\$50 copay in network; \$75 copay out of network
Philadelphia, PA						
Crozer-Keystone ^b	POS	\$0	Yes	\$5 copay	Covered in full up to 120 days per benefit period	\$35 copay
Health Partners	HMO	\$0	Yes	\$5 copay	Covered in full up to 100 days per benefit period	\$35 copay
Independence Blue Cross ^b	PPO	\$80	No	\$5 copay	Covered in full up to 120 days per benefit period	\$35 copay
San Diego, CA						
UCSD Health Plan	HMO	\$0	Yes	\$0 PCP copay \$10 specialist copay	Covered in full up to 100 days per benefit period	\$20 copay

Note: All MCOs covered inpatient hospital services in full.

^aFor all MCOs, the emergency room copay is waived if the enrollee is admitted.

^bFor the POS and PPO products, the cost sharing and benefits shown are for in-network care. For the triple option product, the cost sharing and benefits shown are for in-network care coordinated by a PCP gatekeeper. Self-referral and out-of-network care requires higher cost sharing, and the benefits are often less generous (see Table III.5).

TABLE III.4

ADDITIONAL BENEFITS OFFERED BY DEMONSTRATION MCOs,
YEAR I

Market/MCO	Outpatient Prescription Drugs ^{a,b}	Vision Exams	Eyeglasses	Hearing Exams	Hearing Aids	Dental Care
Atlanta, GA						
SCHP	Up to \$1,250 annual benefit, \$10 copay	\$10 copay 1 exam/2 years	\$15 copay, 20% discount on eyewear, and \$100 plan credit every 24 months	\$10 copay	Not covered	Not covered
St. Joseph's	Up to \$500 annual benefit, \$7/\$20 copays	\$10 copay 1 exam/year	Not covered	\$10 copay 1 exam/year	Not covered	Not covered
Billings, MT						
Yellowstone Community Health Plan	50% benefit per prescription, up to \$100 per month	\$10 copay 1 exam/2 years	Covered up to \$100 every 2 years	\$10 copay	Covered up to \$100 every 2 years	Not covered
Champaign, IL						
Health Alliance Medical Plans	Not covered	\$15 copay 1 exam/year	Not covered	Covered in full 1 exam/year	Not covered	Not covered
Columbus, OH						
Mount Carmel Health Plan	Up to \$800 per year, \$5/\$15 copays	\$5 copay 1 exam/year	Covered up to \$50 every 2 years	\$5 copay 1 exam/year	Not covered	1 exam, 1 cleaning, and 1 set of x-rays every year covered in full
Ohio Health Alliance						
Silver	Up to \$600 per year, \$5/\$10 copay	\$5 copay 1 exam/year	Not covered	\$5 copay 1 exam/year	Not covered	\$10 copay 1 exam/year
Gold	Up to \$1,500 per year, \$5/\$10 copays	\$5 copay 1 exam/year	Covered up to \$100 every year	\$5 copay 1 exam/year	Not covered	\$10 copay 1 exam/year

TABLE III.4 (continued)

Market/MCO	Outpatient Prescription Drugs ^{a,b}	Vision Exams	Eyeglasses	Hearing Exams	Hearing Aids	Dental Care
Houston, TX						
Memorial Sisters of Charity	Up to \$1,800 per year, \$5/\$10 copays	\$10 copay 1 exam/year	Covered up to \$65 every year	\$5 copay/PCP \$10 copay/specialist 1 exam/year	Covered up to \$65 every year	Not covered
New Orleans, LA						
Peoples Health Network	Up to \$60/month, \$720/year, \$5/\$10 copays	\$10 copay 1 exam/year	Frames covered up to \$40 every 2 years; lenses covered between \$30 - \$150 depending on type	Not covered	Not covered	Not covered
Orlando, FL						
Florida Hospital Healthcare System	Up to \$1,200 per year, \$5 copay	\$5 copay 1 exam/year	Covered up to \$200 every year	\$5 copay 1 exam/year	Covered up to \$250 every year	\$5 copay Oral exams, 2 cleanings, 1 x-ray per year
Philadelphia, PA						
Crozer-Keystone	Up to \$1,500 per year, \$10 copay	\$5 copay 1 exam/2 years	Covered up to \$100 every 2 years	\$5 copay every 3 years	Covered up to \$500 every 3 years	\$35 allowance per routine exam every year
Health Partners	Up to \$1,500 per year, \$5/\$10 copays	1 routine exam/year	Covered up to \$100 every 2 years	\$5 copay every 2 years	Covered up to \$500 every 3 years	2 routine exams and cleaning every year covered in full
Independence Blue Cross	Up to \$500 per year, \$5/\$10 copays	None	None	None	None	None
San Diego, CA						
UCSD Health Plan	\$2,500 annual limit \$7/\$10 copays	1 exam/year Covered in full	Covered up to \$90 every 2 years, \$20 copay	\$10 copay per visit	Not covered	\$5 copay for initial exam \$20 copay for cleaning 2 cleanings/year

^aWhen two copayments are shown for prescription drugs, the first refers to generics and the second to brand name drugs.

^bSt. Joseph's offers a prescription drug benefit only in the southern region of its service area.

Only Independence Blue Cross did not include vision, dental, or hearing care in its benefits in Year One (Table III.4). The other 12 MCOs covered vision exams, 11 covered hearing exams, 10 included contributions towards eyeglasses,¹⁷ 6 covered some dental care, and five made contributions towards hearing aids.

The product structure reflected a range of characteristics from "loosely" to "tightly" managed care. In all but the PPO and EPO plans, enrollees were required to select a primary care physician (PCP) who was responsible for coordinating their care and functioning as a gatekeeper. Some MCOs allowed enrollees to select a specialist for this role. In the PPO product offered by Independence Blue Cross, members were not required to choose a PCP and could see providers within or outside of the MCO's network but had lower cost-sharing requirements if they saw in-network providers. The premium IBC charges for this product is the highest in the demonstration and includes the fewest additional benefits. Enrollees in St. Joseph's EPO product were allowed to go to any physician in the MCO's service area that accepted Medicare assignment. But because St. Joseph's did not have contracts with these physicians, they were not obligated to see enrollees. For hospital care, enrollees were required to use the hospitals in St. Joseph's contracted network, and a subset of the available physicians had admitting privileges to those hospitals.

Six MCOs allowed for selected self-referral and out-of-network benefits. With one exception, these benefits were more restricted than in-network benefits and/or had higher cost-sharing requirements (Table III.5). The exception is UCSD Health Plan's direct access benefit, which allows members to self-refer to particular specialists for the same copay charged for PCP-referred services.

¹⁷Eyeglasses are partially covered under Ohio Health Alliance's Gold product but not under its Silver product.

it had too few commercial enrollees to satisfy the 50/50 requirement.⁵ Yellowstone Community Health Plan, owned by Montana's largest tertiary care hospital, operated a commercial HMO business in the Billings area, but it did not satisfy the minimum enrollment requirement for a Medicare risk contract. Health Alliance, owned by the Carle Clinic Association, operated a commercial HMO business in central Illinois and Indiana and was eligible to participate in the Medicare risk program. However, it had not done so because it considered the AAPCC payment rates in its service area too low. It was attracted to the demonstration because of HCFA's willingness to consider alternative payment arrangements.

Independence Blue Cross (IBC) is the only demonstration MCO that was not sponsored by a provider system. It is a major not-for-profit insurer in the Philadelphia metropolitan indemnity and managed care markets. IBC offers commercial HMO products and Medicare supplemental products. It also owns Keystone Health Plan East, which offers commercial HMO products, a traditional Medicare risk product, and a Medicare POS product. IBC was hoping that the PPO product it offered under the demonstration would attract beneficiaries who disliked the network restrictions of its HMO and POS Medicare options but wanted a less expensive alternative to supplemental coverage.

2. Reasons for Participating in the Demonstration

a. Provider-Sponsored MCOs

All 12 provider-sponsored MCOs applied to participate in the demonstration because Medicare is a major source of revenue for their provider systems and because they expect managed care to play an increasingly prominent role in the Medicare program. Thus, they saw the demonstration as a

⁵All of Health Partners' commercial enrollees were its own employees.

vehicle for maintaining or increasing their Medicare market share. While the provider systems of eight of the MCOs had contracts with Medicare HMOs prior to the demonstration and continued to maintain many of those contracts, executives of seven of these eight MCOs specifically indicated that direct contracting with Medicare on a risk basis was preferable. As they explained it, they preferred direct contracting because it allowed them to maintain more control over care management than they would have if they contracted with Medicare HMOs. In the words of one MCO executive, direct contracting would eliminate the “middle man.” However, despite this interest in direct Medicare contracting, three provider-sponsored MCOs stressed the importance of not disrupting their parent systems’ current commercial contract relationships with existing HMOs and therefore had no intention of pursuing direct contracting for commercial business.⁶

Health Alliance Medical Plans was also attracted to the demonstration because it represented an opportunity to receive a higher payment rate than the MCO would have received under a traditional Medicare risk contract. The MCO proposed to HCFA that it be paid a blend of the AAPCC and the USPCC under the demonstration in counties in its proposed service area with relatively low AAPCC rates. HCFA agreed to a payment arrangement in which Health Alliance was to receive a 70/30 blend of the AAPCC and USPCC in part of its service area and standard AAPCC rates in the rest of its service area.⁷

⁶UCSD Health Plan, Health Partners, and Florida Hospital Healthcare System

⁷Now that the M+C payment system has replaced the AAPCC system, the payment to Health Alliance Medical Plans in counties where it was to have received the blended rate is the higher of the M+C floor rate and a 30/70 blend of the USPCC and the M+C rate for that county before the floor provision is applied.

Provider-sponsored MCOs also cited national recognition and the desire to improve the health status of their communities through better coordination of care as reasons for participating in the demonstration.

All the MCOs owned by or affiliated with a provider organization believed that their relationships with their sponsoring provider systems would contribute substantially to their overall success and distinguish them in important ways from traditional Medicare HMOs. According to the MCOs, the key advantages of provider sponsorship include the financial backing of the sponsoring provider system, the strong reputation of the parent health system for providing high quality care, a local presence in the community, and up-front support or "buy-in" from providers. Initially, a few MCOs did not overtly emphasize their relationship with their provider sponsors. However, these MCOs later revised their marketing strategy to capitalize on this relationship.

b. Independence Blue Cross

Independence Blue Cross (IBC), the sole demonstration MCO not sponsored by a provider system, joined the demonstration in order to contract with Medicare on a risk basis as a PPO. It saw the demonstration as an opportunity to add a PPO to its complement of Medicare products, which include supplemental plans and traditional HMO and POS products. IBC priced its PPO demonstration product between its zero-premium Medicare HMO product and the monthly premium charged for its most popular Medicare supplemental policy (standard option C). It believed that its competitive advantage was the design of its Medicare Choices product--a large network and open access provisions--combined with the array of other products it offers to Medicare beneficiaries.

3. Market Environment

a. Market Characteristics

The 13 demonstration MCOs operate in nine metropolitan statistical areas (MSAs): Atlanta, GA; Billings, MT; Champaign-Urbana, IL; Columbus, OH; Houston, TX; New Orleans, LA; Orlando, FL; Philadelphia, PA; and San Diego, CA. The MCOs' service areas range in size from a portion of one county (UCSD Health Plan) to as many as 33 counties (Memorial Sisters of Charity) (see Table III.2). Three MCOs--St. Joseph's, Health Alliance Medical Plans, and Memorial Sisters of Charity--have large service areas that include both an MSA and surrounding counties that include rural areas. Most of the MCOs serve large urban areas, but two MCOs (Yellowstone Community Health Plan and Health Alliance Medical Plans) serve small cities and surrounding rural areas. Health Partners' service area consists of a low-income, inner-city portion of Philadelphia.

The Medicare population in the demonstration areas ranged from roughly 24,000 beneficiaries in the service area of Yellowstone Community Health Plan to almost 600,000 in the five counties served by IBC in the Philadelphia area. The Philadelphia MCOs receive the highest M+C payment rates. Health Partners, which serves only Philadelphia county, had an M+C payment rate of \$733 in 1999. In comparison, Yellowstone and Health Alliance had average payment rates just slightly higher than the 1999 floor payment rate of \$380.

All of the MCOs saw the Medicare managed care penetration rate in their service areas increase between 1997 and 1999. Although the markets served by Yellowstone and Health Alliance (Billings, Montana and Champaign-Urbana, Illinois) had the lowest penetration rate, they also had the greatest percentage increase in penetration. Much of this growth is directly attributable to the demonstration. When they began operations, Yellowstone and Health Alliance were the only Medicare MCOs in their markets; since 1997, another risk MCO has entered the Champaign-Urbana

TABLE III.2
CHARACTERISTICS OF THE SERVICE AREAS
OF THE MEDICARE CHOICES DEMONSTRATION MCOs

MCO*	1999 Medicare Population	1999 M+C Payment Rate ^b	Ratio of M+C Rate to 1999 USPCC	Medicare Risk Penetration Rate		Number of Medicare Risk MCOs ^c	
				9/97	9/99	9/97	9/99
Atlanta, GA							
SCHP (4)*	167,454	\$560.00	1.16	6.1	15.9	4	7
St. Joseph's (30)*	410,850	521.86	1.08	4.8	12.3	4	7
Billings, MT							
Yellowstone Community Health Plan (4)*	23,912	380.56	0.79	2.0	10.6	1	1
Champaign-Urbana, IL							
Health Alliance Medical Plans (21)	206,691	389.48	0.80	0.2	3.5	1	2
Columbus, OH							
Mount Carmel Health Plan (6)	180,834	474.59	0.98	10.6	18.0	4	5
Ohio Health Alliance (5)*	172,686	461.77	0.95	10.6	18.1	4	5
Houston, TX							
Memorial Sisters of Charity (33)	574,914	568.77	1.18	18.6	24.4	10	8 ^d
New Orleans, LA							
Peoples Health Network (4)	159,197	653.35	1.35	21.7	30.2	7	7
Orlando, FL							
Florida Hospital Health care System (3)*	167,812	538.70	1.11	33.7	38.8	9	7

TABLE III.2 (continued)

MCO*	1999 Medicare Population	1999 M+C Payment Rate ^b	Ratio of M+C Rate to 1999 USPCC	Medicare Risk Penetration Rate		Number of Medicare Risk MCOs ^c	
				9/97	9/99	9/97	9/99
Philadelphia, PA							
Crozer-Keystone (1)*	93,275	613.96	1.27	29.0	36.4	5	6
Health Partners (1)	247,535	732.70	1.51	29.0	36.6	5	6
Independence Blue Cross (5)	598,541	631.73	1.31	29.5	37.1	5	8
San Diego, CA							
UCSD Health Plan (1)	348,001	538.09	1.11	46.8	48.4	9	7

*MCOs that withdrew from the demonstration as of April 2000.

^aThe number in parentheses next to each MCO is the number of counties in the MCO's service area.

^bThe 1999 M+C payment rate is weighted by the demonstration MCO's enrollment in the county as of September 1999. For the two MCOs that withdrew from the demonstration at the end of 1998, the 1999 M+C rate is weighted by the county enrollment as of September 1998.

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In most demonstration markets, the number of MCOs participating in the Medicare risk program increased between 1997 and 1999 (see Table III.2). However, in Orlando, San Diego, and Houston, mergers between MCOs and withdrawals from the Medicare managed care program reduced the number of MCOs serving those markets.

Five MCOs reported that competing MCOs in their markets changed the products they offered in order to gain greater market share. Health Alliance Medical Plans reported that a rival MCO had entered the Medicare managed care market offering a zero premium product to compete with the demonstration MCO's \$25 product. Demonstration MCOs serving Columbus, Philadelphia, and Orlando reported that pharmacy benefits offered in those markets had become more generous. In Orlando, Florida Hospital Healthcare System reported that prescription drug coverage maximums had increased to between \$1,500 and \$2,000, levels the MCO felt were "unsustainable." The MCO in Orlando and those serving Columbus and Houston noted that there were more POS or "open access" products available in those markets than at the time of the first site visit.

Four MCOs reported recent or upcoming changes in state legislation or regulation affecting the managed care industry. Provisions related to patient protections and prior authorization were noteworthy legislative issues in Atlanta, Columbus, and Houston. In Georgia, one MCO felt that these issues and other managed care provisions created an "anti-managed care atmosphere," which

led the MCO to curtail its plans to obtain an HMO license and begin offering a commercial product in the Atlanta market.⁸

Eight demonstration MCOs also expressed concern about the impact of the BBA.⁹ Three commented on the severe administrative burden imposed by the reforms, and one noted that the speed with which the legislation was enacted was especially problematic as it did not give MCOs enough time to fully educate providers on new encounter data reporting requirements. The demonstration MCOs also expressed concern about the user fee to cover the costs of HCFA's consumer education efforts, the phase-in of risk adjustment (for demonstration MCOs not already slated to participate in full risk-adjustment), payment rate increases that lag behind rising medical inflation, and changes in POS provisions.¹⁰ Many MCOs participating in the M+C program have expressed these concerns. We did not identify any concerns that were unique to the demonstration MCOs.

Eight of the MCOs also described changes in their provider markets. In Champaign, there were new mergers between area hospital systems, and in Philadelphia and New Orleans, existing hospital alliances or systems broke up or were sold. The MCOs expected that these changes could have both negative and positive effects on demonstration participants. For example, officials with Crozer-

⁸Both demonstration MCOs in Georgia are licensed as provider sponsored health care corporations (PSHCC). SCHP had agreed to only offer a Medicare product under its PSHCC license and to seek an HMO license if it chose to offer a commercial product.

⁹All BBA provisions apply fully to demonstration MCOs. Demonstration MCOs that agreed to test risk adjustment methodologies will begin following the M+C risk adjustment schedule in 2000, although the methodology will be the one agreed to under their demonstration contract.

¹⁰Under BBA regulations, MCOs can no longer allow members to self-refer to in-network physicians. Under the new point-of-service (POS) guidelines, MCOs can only allow members to bypass a primary care gatekeeper to see providers who are not part of their Medicare provider network.

Keystone in Philadelphia were anxious about the impact of the bankruptcy and sale of a provider-owned hospital system on beneficiaries' willingness to trust a provider-sponsored MCO like itself.

But on the "upside," Peoples Health Network in New Orleans reported that the MCO's sponsor, Tenet, was forming new partnerships with nonprofit hospitals that had been part of New Orleans' strong not-for-profit hospital alliance. Hospital relationships in the New Orleans market are shifting with the break-up of this alliance. Other changes affecting hospitals in the demonstration markets include shifts in managed care pressures. For example, Florida Hospital Healthcare System reported that the hospitals in the Orlando market were feeling more pressure as a result of area HMOs' recent financial losses. To remain viable, the HMOs found it necessary to "squeeze" providers, which, in turn, increased the financial strain on hospitals.

In addition to these hospital-related changes, physician organization was changing in the demonstration markets largely in response to managed care. The trend was toward more organization and integration. For example, Yellowstone Community Health Plan reported that by the second site visit, all but a few primary care practices in the Billings area had been purchased by one of two competing hospital systems, one of which also owns Yellowstone. As a result of this shift, although Yellowstone capitulated its primary care physicians, none of the financial risk was transferred outside of the sponsoring provider system.

c. Expanding the Markets Served

Eight MCOs indicated they had applied for or were considering applying for service area expansions, and two MCOs, Yellowstone and UCSD, were granted expansions. Although the two granted expansions did not extend the MCO's service area to include a new county, they allowed the MCO to serve all or a greater portion of a county in which it already operated. MCOs applying for or considering service area expansions were hoping to further their mission by serving more rural

communities or to lock in referral patterns and market share from a broader geographic area. All of the MCOs who had applied for or intended to apply for an expansion pushed back their timetable for completing the process for two reasons. First, they wanted to solidify operations in their core service area before expanding, and they also found the process of contracting with providers and applying for a service area expansion more complicated than anticipated. Several of the MCOs who had begun or completed the application process were surprised by its difficulty and resource-intensive nature. (See Section D on provider networks for additional discussion of issues surrounding service area expansions.)

4. Changes in MCO Structure, Organization, and Philosophy

Several of the MCOs experienced changes in management or ownership, or in the management of the sponsoring provider system. Health Alliance underwent a corporate reorganization, and three other MCOs (Health Partners, Mount Carmel Health Plan, and Peoples Health Network) got a new CEO within the first year of operation under the demonstration. Health Alliance reorganized its corporate structure in response to changes in information technology, which in turn had changed how departments in the company interrelate. Three of the five senior positions (chief medical officer, chief operating officer, and vice president for marketing and development) were vacant at the time of our second site visit.

For Mount Carmel and Peoples Health Network, the change in CEO came because the former CEO moved into a new position within the sponsoring provider system. This change was not unexpected, and Peoples Health Network had planned to bring in a new CEO after demonstration operations were underway. For Health Partners, the change in CEO was a response to a need for leadership with more managed care experience, especially given the significant losses in the

organization's Medicaid product. To further shore up its managed care expertise, the MCO also hired less senior professionals with managed care experience.

Three MCOs also experienced changes in ownership or significant changes in the management of their sponsoring organizations. In 1998, a proposed joint venture between Yellowstone Community Health Plan and Blue Cross/Blue Shield of Montana was approved, and as a result, Yellowstone became a for-profit company owned by two nonprofits.¹¹ The UCSD School of Medicine hired a new dean. His predecessor had been a driving force behind the creation of the UCSD Health Plan. That change in leadership resulted in a decline in the organizational support for the MCO. Finally, one of the seven non-profit hospital owners of Health Partners went bankrupt and was bought by a for-profit hospital management company. It was unclear how this change in ownership would affect the dynamics of the MCO.

All the MCOs to which we returned for a second round of visits indicated that the demonstration was still an important part of their strategy, but several expressed concern about uncertainties in the program and/or reported plans to reduce the growth of the demonstration product. Four MCOs reported that they had revised down their growth projections or were interested in better controlling the growth of the product in the next year.¹² The decision was based on their experience in the demonstration (primarily financial losses) and the desire to see how recent and expected changes in the Medicare+Choice program would affect their operations.

¹¹Yellowstone, which had hoped to use Blue Cross/Blue Shield's large statewide provider network to expand the demonstration product, withdrew from the demonstration at the end of 1999 before it could do so.

¹²Two of these MCOs subsequently withdrew from the demonstration.

C. BENEFIT OFFERINGS

The 13 demonstration MCOs offered a range of products: 7 offered traditional HMO products,¹³ 3 offered POS products, 1 offered a PPO product, 1 offered a triple-option product, and 1 offered an unconventional product that we call an exclusive provider organization (EPO).¹⁴ The MCOs developed these products on basis of the following considerations: (1) their experience with managed care and with managing risk, (2) their knowledge of Medicare beneficiaries' service needs and receptiveness to different types of managed care, (3) the strengths of their delivery system, and (4) their market environment, including beneficiaries' and providers' experience with managed care, contracting ease, competitors' product structure, and payment arrangements.

In this section, we describe the benefits and key cost-sharing requirements of the products as originally offered (identified as Year One)¹⁵ as well as any changes made to those products in the second year of operation (Year Two). Finally, we describe the benefits and cost-sharing requirements of products offered in 2000 by the MCOs still participating in the demonstration.

1. Benefits in Year One

In Year One, eight MCOs offered one benefit package with no premium, and four charged a premium ranging between \$20 and \$80 (Table III.3). Only one MCO, Ohio Health Alliance, offered more than one benefit package to the same service area. It did not charge a premium for its "Silver"

¹³We use the term traditional HMO product to refer to a product in which enrollees do not have coverage for services received outside the network, except for emergencies and urgently needed out-of-area care. Some MCOs without HMO licenses offer such products under the demonstration.

¹⁴EPOs are similar to PPOs in their organization but enrollees are covered only for services received from participating providers (Kongstvedt 1998).

¹⁵The calendar year may differ for the products offered by different MCOs in each benefit year. For example, Florida Hospital Healthcare System (FHHS) began operations in February 1997, and UCSD Health Plan began in July 1998. Therefore, Year One is 1997 for FHHS and 1998 for UCSD.

benefit package but charged a premium of \$15 for its "Gold" package, which had more generous prescription drug coverage.¹⁶ The MCOs offering a zero premium package did so to stay competitive with other Medicare risk MCOs. However, many MCOs noted that they would have liked to have charged a premium to defray costs or to better target beneficiaries in the market, and that they could have justified a premium given their ACR calculations.

All of the benefit packages included a greater breadth of coverage than beneficiaries receive through the traditional fee-for-service Medicare program (without supplemental Medigap coverage). The packages are similar to those offered by traditional Medicare risk MCOs and often included enhanced coverage for Medicare-covered benefits such as physician office visits, inpatient care, and skilled nursing facility (SNF) care. For example, all demonstration plans covered an unlimited number of inpatient hospital days with no patient cost sharing (Table III.3). All also covered at least 100 days of SNF care per benefit period with no patient cost sharing in-network.

Prescription drug coverage is considered to be one of the most important benefits for attracting beneficiaries to an MCO and one of the most market sensitive. Health Alliance, the only MCO that did not offer prescription drug coverage, made that decision because it felt that payment rates in its service area would not support the benefit. The rest of the MCOs limited the benefit with an annual cap ranging from \$500 to \$2500 (Table III.4) and required a copayment that ranged from \$5 to \$25 based on brand-name or formulary status.

¹⁶St. Joseph's offered a benefit package to the 15 counties in the southern portion of its service area that included prescription drug coverage, while the package offered to the northern counties did not. However both products have a premium of \$20.

TABLE III.3
BENEFITS AND COST SHARING FOR SELECTED MEDICARE SERVICES,
YEAR 1

Market/MCO	Product Type	Monthly Premium	Gatekeeper	Physician Office Visits	SNF Services	Emergency Room ^a
Atlanta, GA						
SCHP ^b	POS	\$0	Yes	\$10 copay	Covered in full up to 100 days per benefit period	\$50 copay
St. Joseph's	EPO	\$20	No	\$10 copay	Covered in full up to 100 days per benefit period	\$25 copay
Billings, MT						
Yellowstone Community Health Plan	HMO	\$40	Yes	\$10 copay	Covered in full up to 150 days per benefit period	\$50 copay
Champaign, IL						
Health Alliance Medical Plans	HMO	\$25	Yes	\$5 PCP copay, \$15 specialist copay	Covered in full up to 100 days per benefit period	\$50 copay
Columbus, OH						
Mount Carmel Health Plan	HMO	\$0	Yes	\$5 copay	Covered in full for unlimited days	\$25 copay
Ohio Health Alliance						
Silver Product	HMO	\$0	Yes	\$5 PCP copay, \$10 specialist copay	Covered in full up to 100 days per benefit period	\$50 copay
Gold Product	HMO	\$15	Yes	\$5 PCP copay, \$10 specialist copay	Covered in full up to 100 days per benefit period	\$50 copay
Houston, TX						
Memorial Sisters of Charity ^b	POS	\$0	Yes	\$5 PCP copay, \$10 specialist copay	Covered in full, up to 100 days per benefit period	\$40 copay
New Orleans, LA						
Peoples Health Network	Triple Option	\$0	Yes	\$5 copay	Covered in full, up to 100 days per benefit period	\$50 copay

TABLE III.3 (continued)

Market/MCO	Product Type	Monthly Premium	Gatekeeper	Physician Office Visits	SNF Services	Emergency Room ^a
Orlando, FL						
Florida Hospital Healthcare System	HMO	\$0	Yes	\$5 copay	Covered in full up to 100 days per benefit period	\$50 copay in network; \$75 copay out of network
Philadelphia, PA						
Crozer-Keystone ^b	POS	\$0	Yes	\$5 copay	Covered in full up to 120 days per benefit period	\$35 copay
Health Partners	HMO	\$0	Yes	\$5 copay	Covered in full up to 100 days per benefit period	\$35 copay
Independence Blue Cross ^b	PPO	\$80	No	\$5 copay	Covered in full up to 120 days per benefit period	\$35 copay
San Diego, CA						
UCSD Health Plan	HMO	\$0	Yes	\$0 PCP copay \$10 specialist copay	Covered in full up to 100 days per benefit period	\$20 copay

Note: All MCOs covered inpatient hospital services in full.

^aFor all MCOs, the emergency room copay is waived if the enrollee is admitted.

^bFor the POS and PPO products, the cost sharing and benefits shown are for in-network care. For the triple option product, the cost sharing and benefits shown are for in-network care coordinated by a PCP gatekeeper. Self-referral and out-of-network care requires higher cost sharing, and the benefits are often less generous (see Table III.3).

TABLE III.4

ADDITIONAL BENEFITS OFFERED BY DEMONSTRATION MCOs,
YEAR 1

Market/MCO	Outpatient Prescription Drugs ^{a,b}	Vision Exams	Eyeglasses	Hearing Exams	Hearing Aids	Dental Care
Atlanta, GA						
SCHP	Up to \$1,250 annual benefit, \$10 copay	\$10 copay 1 exam/2 years	\$15 copay, 20% discount on eyewear, and \$100 plan credit every 24 months	\$10 copay	Not covered	Not covered
St. Joseph's	Up to \$500 annual benefit, \$7/\$20 copays	\$10 copay 1 exam/year	Not covered	\$10 copay 1 exam/year	Not covered	Not covered
Billings, MT						
Yellowstone Community Health Plan	50% benefit per prescription, up to \$100 per month	\$10 copay 1 exam/2 years	Covered up to \$100 every 2 years	\$10 copay	Covered up to \$100 every 2 years	Not covered
Champaign, IL						
Health Alliance Medical Plans	Not covered	\$15 copay 1 exam/year	Not covered	Covered in full 1 exam/year	Not covered	Not covered
Columbus, OH						
Mount Carmel Health Plan	Up to \$800 per year, \$5/\$15 copays	\$5 copay 1 exam/year	Covered up to \$50 every 2 years	\$5 copay 1 exam/year	Not covered	1 exam, 1 cleaning, and 1 set of x-rays every year covered in full
Ohio Health Alliance						
Silver	Up to \$600 per year, \$5/\$10 copay	\$5 copay 1 exam/year	Not covered	\$5 copay 1 exam/year	Not covered	\$10 copay 1 exam/year
Gold	Up to \$1,500 per year, \$5/\$10 copays	\$5 copay 1 exam/year	Covered up to \$100 every year	\$5 copay 1 exam/year	Not covered	\$10 copay 1 exam/year

TABLE III.4 (continued)

Market/MCO	Outpatient Prescription Drugs ^{a,b}	Vision Exams	Eyeglasses	Hearing Exams	Hearing Aids	Dental Care
Houston, TX						
Memorial Sisters of Charity	Up to \$1,800 per year, \$5/\$10 copays	\$10 copay 1 exam/year	Covered up to \$65 every year	\$5 copay/PCP \$10 copay/specialist 1 exam/year	Covered up to \$65 every year	Not covered
New Orleans, LA						
Peoples Health Network	Up to \$60/month, \$720/year, \$5/\$10 copays	\$10 copay 1 exam/year	Frames covered up to \$40 every 2 years; lenses covered between \$30-\$150 depending on type	Not covered	Not covered	Not covered
Orlando, FL						
Florida Hospital Healthcare System	Up to \$1,200 per year, \$5 copay	\$5 copay 1 exam/year	Covered up to \$200 every year	\$5 copay 1 exam/year	Covered up to \$250 every year	\$5 copay Oral exams, 2 cleanings, 1 x-ray per year
Philadelphia, PA						
Crozer-Keystone	Up to \$1,500 per year, \$10 copay	\$5 copay 1 exam/2 years	Covered up to \$100 every 2 years	\$5 copay every 3 years	Covered up to \$500 every 3 years	\$35 allowance per routine exam every year
Health Partners	Up to \$1,500 per year, \$5/\$10 copays	1 routine exam/year	Covered up to \$100 every 2 years	\$5 copay every 2 years	Covered up to \$500 every 3 years	2 routine exams and cleaning every year covered in full
Independence Blue Cross	Up to \$500 per year, \$5/\$10 copays	None	None	None	None	None
San Diego, CA						
UCSD Health Plan	\$2,500 annual limit \$7/\$10 copays	1 exam/year Covered in full	Covered up to \$90 every 2 years, \$20 copay	\$10 copay per visit	Not covered	\$5 copay for initial exam \$20 copay for cleaning 2 cleanings/year

^aWhen two copayments are shown for prescription drugs, the first refers to generics and the second to brand name drugs.

^bSt. Joseph's offers a prescription drug benefit only in the southern region of its service area.

Only Independence Blue Cross did not include vision, dental, or hearing care in its benefits in Year One (Table III.4). The other 12 MCOs covered vision exams, 11 covered hearing exams, 10 included contributions towards eyeglasses,¹⁷ 6 covered some dental care, and five made contributions towards hearing aids.

The product structure reflected a range of characteristics from "loosely" to "tightly" managed care. In all but the PPO and EPO plans, enrollees were required to select a primary care physician (PCP) who was responsible for coordinating their care and functioning as a gatekeeper. Some MCOs allowed enrollees to select a specialist for this role. In the PPO product offered by Independence Blue Cross, members were not required to choose a PCP and could see providers within or outside of the MCO's network but had lower cost-sharing requirements if they saw in-network providers. The premium IBC charges for this product is the highest in the demonstration and includes the fewest additional benefits. Enrollees in St. Joseph's EPO product were allowed to go to any physician in the MCO's service area that accepted Medicare assignment. But because St. Joseph's did not have contracts with these physicians, they were not obligated to see enrollees. For hospital care, enrollees were required to use the hospitals in St. Joseph's contracted network, and a subset of the available physicians had admitting privileges to those hospitals.

Six MCOs allowed for selected self-referral and out-of-network benefits. With one exception, these benefits were more restricted than in-network benefits and/or had higher cost-sharing requirements (Table III.5). The exception is UCSD Health Plan's direct access benefit, which allows members to self-refer to particular specialists for the same copay charged for PCP-referred services.

¹⁷Eyeglasses are partially covered under Ohio Health Alliance's Gold product but not under its Silver product.

TABLE III.5

OUT-OF-NETWORK OPTIONS/SELF-REFERRAL BENEFITS*

Market/MCO	Benefits Covered	Annual Limit	Deductible	Copay/ Coinsurance
Atlanta, GA				
SCHP	70% coverage for medically necessary services received from non-contracted providers or hospitals; all such care requires PCP referral or pre-certification and authorization by the MCO	\$50,000	\$764 inpatient deductible (same as Medicare Part A)	30%
Houston, TX				
Memorial Sisters of Charity	Unlimited PCP visits and diagnostic testing (cost of tests not to exceed \$50); 2 specialist consultations per plan year; 6 physical therapy visits per plan year (no coverage for hospital services)	\$5,000	\$75	20%
New Orleans, LA				
Peoples Health Network				
Level 2	Self-referred in-network	None	None	10% inpatient up to \$500; \$15 physician copay
Level 3	Self-referred out-of-network	None	Same as Medicare for all Medicare covered benefits	Same as Medicare for all Medicare covered benefits
Philadelphia, PA				
Crozer-Keystone	Self-referral option for in- and out-of-network care; some services require prior authorization from the MCO before self-referring (e.g., elective inpatient admissions, DME, home health care, etc.)	None	\$375 per hospitalization, outpatient surgery, SNF stay	\$35 physician, lab, outpatient rehab copay
Independence Blue Cross	Same as in-network benefits but with fewer inpatient days, rehab visits, mental health days/visits, and SNF days covered	\$1 million lifetime limit	\$250	20%
San Diego, CA				
UCSD Health Plan	Self-referral to a specified list of direct access specialties	None	None	Same as PCP-referred specialist visits

*Yellowstone Community Health Plan, Florida Hospital Healthcare System, Ohio Health Alliance, St. Joseph's, Mount Carmel Health Plan, and Health Alliance Medical Plans did not offer an out-of-network benefit and required a PCP referral for all specialists other than those the MCO is legally required to offer direct access to (in most cases, OB/GYN).

2. Benefits in Year Two

In the second year of operation, MCOs made limited changes in their premiums and benefits and no changes in out-of-network coverage options. Only Independence Blue Cross changed its premium, raising it from \$80 to \$90. But when we spoke with MCOs on our second site visit (1998-1999), at least three of them were considering adding or increasing their premium in 2000 to help cover costs, and Independence Blue Cross was considering further increases. These MCOs either served counties with low payment rates (Yellowstone and Health Alliance) or were considering expanding into counties with low payment rates (Mount Carmel). In contrast, the MCOs in urban areas, facing greater managed care competition, believed that the zero premium would persist there, barring a general shift in the market dynamics.

Only one MCO made a change in coverage for Medicare-covered benefits from Year One to Year Two. Mount Carmel Health Plan reduced its SNF benefit from full coverage for unlimited days to full coverage for 125 days per year.¹⁸

Peoples Health Network was the only MCO that made significant changes to its additional benefits in Year Two. It raised the annual limit on its pharmacy benefit from \$720 to \$1,200 and dropped the \$60 monthly limit. It also added coverage for hearing exams. Other MCOs simply “tweaked” their benefits. Some changed the composition of their coverage, moving from a defined service (e.g., two dental cleanings) to a defined benefit (\$50 towards dental care) or increasing or decreasing a copayment. Most of these changes were intended to make the benefit more useful to

¹⁸Peoples Health Network also modified the home health benefit under its triple option product to properly align incentives across its three coverage options. The benefit under the self-referral, in-network option was increased to match the benefits available under the other two options (increasing coverage to 100 percent from 80 percent).

beneficiaries (for example, by increasing access to providers), to simplify administration, or to make the product more attractive while maintaining fiscal viability.

3. Benefits in 2000

The eight MCOs still participating in the demonstration in 2000 substantially changed their benefits this year (Table III.6). Two began offering multiple benefit packages: Mount Carmel Health Plan divided its service area into two segments and offers the same benefits to each segment but charges different premiums, and Independence Blue Cross now offers beneficiaries the choice of three plans with different premiums, physician copayments, and pharmacy benefits.

Three MCOs instituted or raised premiums as of January 1, 2000. Health Alliance Medical Plans increased its premium from \$25 to \$45 across its entire service area. Mount Carmel, which previously charged no premium, instituted new premiums in different counties: \$45 in Franklin, Madison, and the newly added Union county, and \$60 in Delaware, Fairfield, Licking, and Pickaway counties. Independence Blue Cross, which had charged a premium of \$90 in 1999, now offers three packages with premiums ranging between \$70 and \$125. The other five MCOs still participating in the demonstration continue to offer zero premium products.

Four MCOs changed their cost-sharing requirements for physician office visits in 2000. Mount Carmel raised the \$5 copay for physician office visits to \$15 for PCP visits and \$25 for specialist visits. Peoples Health Network increased physician copayments for its Choice 2 option (self-referred care within network) from \$15 to \$20 but did not change cost-sharing for its other options. Physician copayments in Independence Blue Cross's three packages, once \$5 across the board, now range between \$5 and \$15 for PCP visits and between \$10 and \$25 for specialist visits. UCSD Health Plan lowered its specialist copayment from \$10 to \$7 (there is still no copayment for PCP visits).

TABLE III.6

CHANGES IN BENEFIT OFFERINGS IN 2000

Market/MCO	Number of Benefit Packages Offered	Premium	Cost Sharing for Physician Visits	Prescription Drugs
Atlanta, GA				
SCHP	No change	No change	No change	No change
Champaign, IL				
Health Alliance Medical Plans	No change	Increased from \$25 to \$45	No change	No change
Columbus, OH				
Mount Carmel Health Plan	Divided service area into 2 segments. Offers same benefits in each segment but requires different premiums.	Increased from \$0 to \$45 in one segment and to \$60 in the other segment	Increased copay from \$5 to \$15 for PCP visits and from \$5 to \$25 for specialist visits	Increased brand-name copay from \$15 to \$20
Houston, TX				
Memorial Sisters of Charity	No change	No change	No change	Introduced a three-tiered pharmacy benefit: \$5 for generics, increased preferred brand-name copay from \$10 to \$15 and began charging \$25 for non-preferred drugs
New Orleans, LA				
Peoples Health Network	No change	No change	Increased copay for self-referred in-network physician visits from \$15 to \$20	Increased copays from \$5 to \$7 for generic drugs and from \$10 to \$15 for brand-name drugs
Philadelphia, PA				
Health Partners	No change	No change	No change	Increased annual limit from \$1,500 to \$1,700

TABLE III.6 (continued)

Market/MCO	Number of Benefit Packages Offered	Premium	Cost Sharing for Physician Visits	Prescription Drugs
Independence Blue Cross	Offers three benefit packages instead of one	Three premiums are \$70, \$100, and \$125; lowest premium package is less than the premium of \$90 for the single 1999 package	Physician copays vary by benefit package but generally increased: \$15 for PCP, \$25 for specialist visits; \$5 PCP and \$10 specialist; \$10 PCP and \$15 specialist. In 1999, physician copays were \$5 for both PCP and specialist visits.	Prescription drugs are not covered in the lowest premium package. An unlimited generic drug benefit with no brand-name coverage is included in the next lowest premium package. The drug benefit in the highest premium package is most similar to the 1999 benefit: unlimited generic drug coverage and \$500 in brand-name coverage. A three-tiered benefit was introduced for this package with a generic copay of \$10, preferred brand-name copay of \$15, and a non-preferred copay of \$25. (In 1999, both generic and brand-name drugs were limited to \$500, and the copay was \$5 for generic drugs and \$15 for brand-name drugs.)
San Diego, CA				
UCSD Health Plan	No change	No change	Lowered copays for specialist visits from \$10 to \$7 (UCSD still does not require PCP copays)	Reduced the maximum coverage limit from \$2,500 to \$2,000 but began applying the limit only to brand-name drugs (brand-name and generic drugs were limited in 1999). The generic copay was reduced from \$7 to \$5 and the brand-name copay was increased from \$10 to \$12.

The other noteworthy change in cost-sharing for Medicare-covered services is an increase in the copayment for emergency room visits. Three MCOs (IBC, Memorial Sisters of Charity, and Mount Carmel) increased the copayment by between \$5 and \$25. All eight MCOs continue to waive this copayment if a beneficiary is admitted to the hospital within 24 to 72 hours of the emergency room visit. Mount Carmel Health Plan eliminated a benefit, dropping coverage for additional dental care.

Of the key additional benefits, the most significant changes in 2000 are in the pharmacy benefit. Six of the eight remaining MCOs adjusted their annual limit or copayment levels, or they introduced a three-tiered copayment structure. Health Partners increased the annual limit for prescription drug coverage from \$1,500 to \$1,700. UCSD decreased the annual limit from \$2,500 to \$2,000 but now applies the limit only to brand-name drugs, not to both generic and brand-name drugs as it did in years one and two. UCSD also decreased its generic drug copayment from \$7 to \$5 and increased the brand-name copayment from \$10 to \$12. Mount Carmel increased its brand-name copayment from \$15 to \$20 but did not change its generic copayment. Peoples Health Network increased its generic copayment from \$5 to \$7 and its brand-name copayment from \$10 to \$15.

Memorial Sisters of Charity and Independence Blue Cross are the only demonstration MCOs to introduce a three-tiered copayment structure for the pharmacy benefit in 2000. In Year Two, Memorial Sisters of Charity charged \$5 for generic drugs and \$10 for brand-name drugs. It now charges \$5 for generic drugs, \$15 for preferred brand-name drugs, and \$25 for nonpreferred brand-name drugs. Independence Blue Cross offers no prescription drug coverage in its lowest premium (\$70) package,¹⁹ and unlimited generic drug coverage but no brand-name coverage in its \$100-premium package. In its highest premium package (\$125), the pharmacy benefit includes unlimited

¹⁹The premium for this package is below the premium for the single package offered in 1999 (\$70 vs. \$90). However, the single package offered in 1999 included a \$500 drug benefit.

generic drug coverage and \$500 in brand-name drug coverage, plus copayments of \$10 for generic drugs, \$15 for preferred brand-name drugs, and \$25 for nonpreferred brand-name drugs.

The Medicare-covered and additional benefits are shown in tabular form in Appendix C.

D. MARKETING STRATEGIES AND EXPERIENCE

1. Initial Approach

All the demonstration MCOs developed marketing approaches that capitalized on their existing relationships with Medicare beneficiaries—a strategy many referred to as “relationship marketing.” Two of the MCOs—Independence Blue Cross and Health Partners—had experience as insurers with Medicare beneficiaries, while the remaining provider-sponsored MCOs hoped to capitalize on their experience as Medicare providers.²⁰

Independence Blue Cross and Health Partners marketed their demonstration product primarily to beneficiaries who were already familiar with their other insurance products. Independence Blue Cross created a PPO product to appeal specifically to its supplemental policyholders who were not attracted to its traditional Medicare HMO product or its POS product. Their marketing executives targeted supplemental policyholders who expressed interest in IBC’s Medicare HMO but ultimately did not enroll. Initially, Health Partners targeted Medicare beneficiaries it served through its Medicaid product and marketed directly to other dual eligibles in its service area. However, by the time of our second site visit, it was moving away from this strategy because of concerns about adverse selection.

The other 11 provider-sponsored MCOs primarily targeted Medicare eligibles associated with their provider systems, either as volunteers or as participants in voluntary senior clubs or organizations. The provider-sponsored MCOs typically differentiated themselves from traditional

²⁰Health Partners’ enrollment consisted almost entirely of Medicaid beneficiaries. Its experience as an insurer with the Medicare population was limited to dual eligibles.

insurers and HMOs by highlighting their historic local presence in the community, their reputation for quality, and their hospitals' nonprofit status.

Before beginning operations, 11 MCOs conducted market research, which typically involved focus groups with seniors and/or surveys.²¹ This research was used primarily as input to marketing techniques and materials, but it also fed into MCO benefit and network design. Important findings included the following: Beneficiaries dislike network restrictions, and those with less managed care exposure in particular tend to be skeptical of the relatively generous benefits offered by MCOs. They also prefer an "individual" marketing approach that incorporates the beneficiary's particular needs when explaining the advantages of the product. In addition, physician participation and support of the MCO were found to be "key" to attracting members.

The demonstration MCOs reached Medicare beneficiaries in many ways. All 13 used direct-mail. Independence Blue Cross and Health Partners used mailing lists of those it already covered in another capacity, and the other MCOs started with those affiliated with their provider systems or people on lists purchased from vendors (e.g., all persons over 65 in the market). Twelve of the 13 used mass media as well. Only the inner city MCO, Health Partners, did not use mass media, relying instead on community newspapers because of the high cost of other advertising in its market and because its targeted service area was small. The other MCO with an equally focused marketing effort is UCSD Health Plan, which used direct mail and some newspaper advertising for its demonstration product along with mass media to promote general recognition of the MCO. Most demonstration MCOs also used group presentations, though MCOs in areas with higher Medicare

²¹Of the two MCOs that did not do market research, one cited its reason for not doing so as a failure of the first advertising agency it employed. The second felt that its experience serving the commercial population as an HMO and the Medicare population as a provider was sufficient for the initial design and start-up, especially given the lack of competition in its market.

managed care penetration generally found this approach less useful than MCOs in less mature markets, where beneficiaries have been less exposed to these types of presentations.

Physician endorsement or support was also an important component of the overall marketing campaign for five demonstration MCOs. The most aggressive MCO in this respect (Crozer-Keystone) recruited "physician ambassadors" to conduct outreach to patients and potential members. Three MCOs (Ohio Health Alliance, Peoples Health Network, and UCSD Health Plan) sent letters to Medicare beneficiaries on behalf of their primary care providers (with provider consent). Another MCO (Yellowstone Community Health Plan) visited participating physician offices to make itself better known to the physicians and to encourage them to discuss the demonstration product with their Medicare patients. Several of the MCOs that initially used physician-related marketing were concerned that this approach may have exposed them to adverse selection by targeting beneficiaries who already had a strong relationship with a physician.

2. Marketing Experience and Modifications to Approach

At the time of the second site visit, most of the demonstration MCOs considered their marketing efforts successful, citing low acquisition costs,²² increased enrollment, and fulfillment of sales goals as evidence that their efforts were on target. Only two MCOs, Peoples Health Network and Health Partners, significantly changed their marketing strategy in the first year of operation after an unsuccessful first effort. Peoples Health Network completely revised its marketing materials to simplify the description of its triple-option product. It is also rebuilding the trust it lost in the community and with providers as a result of the original complicated materials. Peoples Health also revised its contracts with sales representatives to better align financial incentives with the retention of new members and to increase education and training requirements for representatives. Health

²²By acquisition cost, the MCOs are referring to the marketing and sales costs required to attract a new member.

Partners restructured its marketing department and shifted the focus of its marketing campaign to emphasize the reputation of its sponsoring hospitals. Previously, it focused on community involvement but lacked a "real theme" in its earlier efforts.

Other MCOs simply fine-tuned their marketing efforts. For example, several added elements to improve member retention such as orientation sessions or "re-calls" to enrolling members who submitted an application several months after their initial contact with the MCO. Like Health Partners, several MCOs also shifted the focus of their marketing efforts somewhat to emphasize the connection with their sponsoring provider or key hospital system (Yellowstone Community Health Plan, Mount Carmel Health Plan, and SCHP).

Six of the MCOs enhanced their marketing campaigns and strategies on the basis of findings from additional beneficiary focus groups. Findings varied across markets, although several MCOs noted both the importance of pharmacy benefits to beneficiaries and a lack of understanding about key features of the benefit. For instance, many beneficiaries had difficulty understanding the use of a formulary and assessing the value of different benefit characteristics such as coverage maximums versus copayment levels.

In general, MCOs had positive experiences working with the HCFA Regional Office to obtain approval of marketing materials, although several noted that there were still inconsistencies and delays in the process. Two MCOs specifically commented that the 45-day (or longer) wait most MCOs undergo before receiving HCFA approval makes it difficult to respond quickly to market changes.

E. PROVIDER NETWORK AND PAYMENT

Sponsoring provider systems served as the foundation of the demonstration networks for 12 MCOs. These MCOs faced a variety of challenges in establishing a comprehensive network for the demonstration. Those serving rural areas experienced the most difficulty because of the small number of providers in these areas, their lack of familiarity with or resistance to managed care, and, in some cases, their affiliation with competing provider systems. In addition, one MCO was unable to contract with clinics designated as Rural Health Centers, since these clinics receive higher Medicare reimbursement rates under that designation than they would under a contract with the MCO. Some provider-sponsored MCOs in urban areas also had difficulties contracting with providers because their affiliation with competing health systems, their disdain for managed care, and disagreements about payment. MCOs that enrolled non-Medicare beneficiaries had some advantage in that they had pre-existing relationships with many providers. However, for almost all the MCOs, there were some types of providers, ranging from cardiologists to those offering oxygen services, with whom it was difficult to contract in establishing the initial network or in extending the network for service area expansions.

The provider-sponsored MCOs felt that their strong relationship with the sponsoring provider system was an asset in terms of marketing and care management. However, seven of the MCOs also had trouble as a managed care organization establishing a constructive relationship with providers. For instance, they had problems communicating with and educating providers, making them feel invested in the Medicare product, creating appropriate financial incentives for different types of providers, and balancing an often adversarial relationship between physicians and hospitals. As several MCOs mentioned, these difficulties arose in part from the often great differences in philosophy and goals associated with running a provider organization such as a hospital versus running an MCO.

All 12 provider sponsored MCOs had to add some types of providers (SNF, hospice, vision, pharmacy, mental health, etc.). Most also had to contract with additional providers because they had proposed to serve areas as part of the demonstration that were outside the core service area of the sponsoring provider systems. Only Independence Blue Cross was able to develop a network for the demonstration without contracting with additional providers. Instead, it combined the large, comprehensive network in place for its commercial PPO with the network in place for the Medicare HMO product offered by its HMO subsidiary, Keystone Health Plan East.

St. Joseph's is unique among the demonstration participants in that it has not contracted with physicians for its demonstration product. Instead, it defined its network to include all physicians in its 30-county service area who accept Medicare assignment, although only those with privileges at participating hospitals can admit enrollees.

1. Provider Network

a. Physician Network

The size and composition of the MCOs' provider networks varied considerably, with the largest consisting of roughly 11,600 physicians and 80 hospitals and the smallest having 195 physicians and 4 hospitals (see Table III.7). Beyond the basic program requirements established by HCFA, network size and composition were influenced by market factors such as provider supply and organization, MCO and provider system competition, number of Medicare beneficiaries, and the rural nature of some markets. Specialists were heavily represented in all networks, accounting for between 69 and 88 percent of all MCO physicians.

TABLE III.7

SIZE AND COMPOSITION OF PROVIDER NETWORKS

Market/MCO	Number of Physicians		Percent Specialists		Number of Hospitals		Contracting Arrangements with Physicians			
	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2	Contracts with Individuals Primarily or Exclusively	Contracts with Groups Primarily or Exclusively	Contracts with Both Individuals and Groups ^a	Does Not Contract with Physicians
Atlanta, GA										
SCHP	1,403	2,000	80 ^b	80 ^b	7	7		✓		
St. Joseph's	2,824 ^c	NA	NA	NA	21	NA				✓
Billings, MT										
Yellowstone Community Health Plan	147	195	69	77	3	4		✓		
Champaign, IL										
Health Alliance Medical Plans	1,095	1,367	69	80	14	16		✓		
Columbus, OH										
Mount Carmel Health Plan	583	615	71	69	5	5		✓		
Ohio Health Alliance	1,853	NA	78	NA	8	NA		✓		
Houston, TX										
Memorial Sisters of Charity	1,610	2,647	69	76	29	30			✓	
New Orleans, LA										
Peoples Health Network	810	789	83	72	6	6		✓		
Orlando, FL										
Florida Hospital Healthcare System	648	753	84	74	5	6	✓			
Philadelphia, PA										
Crozer-Keystone	593	663	70	72	5	6			✓	
Health Partners	946	3,483	68	74	15	15			✓	
Independence Blue Cross	12,853	11,600	71	NA	80	NA	✓			

TABLE III.7 (continued)

Market/MCO	Number of Physicians		Percent Specialists		Number of Hospitals		Contracting Arrangements with Physicians			
	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2	Contracts with Individuals Primarily or Exclusively	Contracts with Groups Primarily or Exclusively	Contracts with Both Individuals and Groups ^a	Does Not Contract with Physicians
San Diego, CA										
UCSD Health Plan	228	653	78	88	2	6		✓		

^aIn each MCO that contracts with individual physicians and groups, the majority of enrollees is served by the groups.

^bA small number of specialists also assume PCP responsibilities (61 in Year 1 and 100 in Year 2).

^cSt. Joseph's does not have contracts with network physicians. Members are allowed to use any physician who participates with Medicare, accepts assignments, and practices in the service area.

NA = Not available.

MCOs developed their physician networks through contracts with individual physicians, physician groups, or a combination of the two. At the outset of the demonstration, two MCOs contracted primarily or exclusively with individual physicians even if the physicians were part of a group; six MCOs contracted primarily or exclusively with large physician groups or intermediaries such as independent practice associations (IPAs), physician organizations (POs), or large medical groups; four contracted with individual physicians and physician groups (with the majority of enrollees being served by groups); and one MCO (St. Joseph's) did not contract with physicians at all.

After 16 months of operations, only Yellowstone Community Health Plan was not still using its original contracting strategy. Yellowstone moved from contracting primarily with individual physicians to contracting almost exclusively with groups. This change was due to a shift in physician market organization as the two hospital-based provider systems in the market, one of which is the sponsor of the demonstration MCO, bought most of the physician practices in the market.²³

All of the MCOs modified their physician networks somewhat over the first 16 months, and four had a net gain of over 400 physicians. Those that made minimal changes in their network mostly added physicians to enhance access in selected areas. Of the four MCOs that greatly increased the size of their network, UCSD Health Plan's gain reflects an expanded service area, and Health Partners' gain reflects its success in serving other populations by contracting with provider groups already in the sponsoring organizations' network. The increase in the size of the SCHP network is

²³A handful of MCOs that originally contracted almost exclusively with individual providers or providers groups added a few provider groups or individual providers (the opposite of their original contracting strategy) primarily for access purposes. However, there were so few providers in these cases that the change did not fundamentally affect their provider contracting strategy or our classification of them.

part of the MCO's general effort to add PCPs to its network. Memorial Sisters of Charity expanded its network for two reasons. First, it wanted to strengthen its network in its current service area and did so by contracting with additional physicians including two very large groups. Second, the MCO was preparing for a service area expansion.

Once established, most MCOs did not discontinue or add major components to their provider network unless they were expanding their service area. Further, physician turnover was minimal, with most attributable to natural attrition (e.g., retirement, relocation, death). Overall, MCOs neither experienced exceptional problems in maintaining their network nor expected their general contracting strategy to change, barring significant changes in physician organization in the market.

b. Hospital Network

In developing their provider networks, six MCOs contracted with additional hospitals. Three of the six did so specifically to include transplant or rehabilitation services, and the remaining did so to ensure adequate geographic access for beneficiaries and to increase their physician networks through the newly contracted hospitals' affiliated physician groups. A seventh MCO was able to secure access to transplant services through its reinsurance agreement—a considerably less costly arrangement than directly contracting with another hospital for the services. The remaining six MCOs did not have to contract with additional hospitals.

Six of the demonstration MCOs added hospitals to their provider networks within the first 16 months of operations. Five added one or two new facilities, and one (UCSD) added four hospitals to meet needs generated by a service area expansion (see Table III.7). A few MCOs mentioned that they expected to lose one or two hospitals from their networks as a result of shifts in the market, causing hospitals to close, merge with another hospital, align themselves exclusively with a competing provider network, or to be bought by another firm.

2. Provider Payment

a. Physician Payment

The demonstration MCOs vary greatly in their financial arrangements with physicians. These arrangements can differ in terms of three features: (1) in whether MCOs pay individual physicians directly or if they pay intermediaries such as medical groups, IPAs, and POs; (2) in the basic payment method—for example, fee-for-service (FFS), capitation or salary; and (3) in the nature of the risk-sharing arrangements with providers, such as bonuses or withholds. Factors that influence physician payment arrangements include physician infrastructure, MCO and physician experience with risk arrangements for Medicare or other populations, and the arrangements that prevail in the market.

Six demonstration MCOs use a combination of arrangements, paying individual physicians directly and paying intermediate entities (who in turn pay the individual physicians).²⁴ Five demonstration MCOs pay intermediate organizations, and two of these MCOs also pay some individual physicians directly.²⁵ Finally, two MCOs pay all of their physicians individually, whether or not they are part of a group or an intermediate organization. For all 13 MCOs, these arrangements apply to both PCPs and specialists physicians.

Primary care services are either capitated or paid on a FFS basis. Four MCOs pay for primary care services through FFS, four pay for primary care services on a capitated basis, and the remaining five MCOs use both types of arrangements to pay for primary care services. Only three MCOs

²⁴An MCO may pay an intermediary organization using one method (e.g., capitation), and the intermediary may pay its physicians using another method (e.g., FFS). We report here on how MCOs pay for physician services regardless of whether the payment goes to individual physicians or intermediaries.

²⁵In these cases, the MCO is acting as a third party administrator in that the intermediate organization is paying the physician, but the MCO is "cutting" the check.

modified their payment method for primary care services by the time of our second site visit: one added the option of FFS payment to expand the physician network to include physicians who were unwilling to participate on a capitated basis; another added a few capitated groups to an all-FFS network to expand access; and one began capitating physicians who met an enrollment threshold and elected this method of payment.

In addition to the basic payment arrangement, five MCOs had withholds or bonuses for PCPs. Withholds can be specified as a percentage of payment (capitation or FFS) or as a fixed dollar amount per member per month. Bonuses (or "surplus sharing") are often linked to service type or service "pools," and PCPs can be eligible for bonuses on primary care services, specialty services, or hospital services, depending upon the arrangements. When PCPs act as gatekeepers, they are more likely to be eligible for bonuses from savings on types of services other than primary care. Most MCOs distribute bonuses and withholds on the basis of measures of utilization and quality. The actual bonus or withhold payment is distributed under the same arrangement as the base payment to the individual physician or intermediate organization. If an intermediary is used, how the bonus or withhold is then passed to the individual physicians varies by group. For the eight MCOs with no bonus or withhold arrangements, many noted that intermediate organizations may have their own bonus or withhold arrangements that are not required or administered by the MCO.

In contrast to the mix of arrangements used by MCOs to pay for primary care services, payment arrangements for specialty care are generally more consistent. All but three MCOs pay for specialty services exclusively on a FFS basis, and only five MCOs have a withhold or bonus that applies to specialists. Again, physicians paid by intermediate organizations may be eligible for bonuses or have withholds from that organization.

b. Hospital Payment

Most MCOs did not change their financial arrangements with hospitals during the course of the demonstration. At the time of our second visit, four MCOs were capitating their hospitals. In most of those cases, one key hospital or key hospital system was capitated, and any outside "community" hospital was paid out of the key hospital's capitated pool on a DRG (diagnosis related group) or per diem basis. Two MCOs used DRGs exclusively to pay network hospitals.²⁶ Seven paid their hospitals on a per diem basis, and two paid a small number of hospitals on a DRG basis. Only one MCO made across-the-board changes in hospital payment arrangements, when hospitals asked to be paid per diems instead of a case rate. Several other MCOs made some small changes affecting individual hospitals; for example, in contracting with a hospital outside of the sponsoring system, one MCO paid DRGs rather than capitation.

3. Distributing Financial Risk

In distributing risk throughout their networks, MCOs vary in the amount of risk that they pass downstream to network physicians and hospitals. The risk arrangements were often influenced by the providers' experience with risk, the comfort level of MCOs in structuring risk arrangements, especially in markets where providers were inexperienced in managing risk, and the MCO's philosophy about how best to manage risk and align incentives. Care delivery patterns also had an impact on risk distribution. For example, if one hospital system served almost all members of a plan, it made sense for most or all of the risk to remain with this system.

Among the 12 provider-sponsored MCOs, some MCOs or their sponsoring provider system retained all of the risk, while others transferred some or all of the risk to physicians and other providers outside the sponsoring system. A number of MCOs wanted to have providers accept more

²⁶Both of these MCOs subsequently withdrew from the demonstration.

risk (both upside and downside) after the first year, when they would have more experience. This was true especially for three MCOs, two of which retained all of the risk (or their sponsoring provider system did) while providers in the third were only at risk for a withhold. However, providers in these MCOs were skeptical of accepting more risk, and arrangements did not change.²⁷ In the markets where these MCOs operated, providers had little experience managing risk, or the demonstration MCOs had low enrollment. These three MCOs noted that it was difficult to fundamentally change arrangements as quickly as they might have liked once the original structure was in place, a sentiment echoed by other MCOs. Within other MCOs there was some discussion of changing risk arrangements to have providers manage more risk. In almost all cases the current arrangements reflected the comfort level of the providers and the MCO at that time.

One MCO which did not pass any risk downstream was Independence Blue Cross. That MCO retained all of the financial risk for its demonstration product, paying physicians on a FFS basis with no risk-sharing and paying hospitals on a per diem basis.

F. QUALITY ASSURANCE AND UTILIZATION MANAGEMENT

In the initial application to HCFA, MCOs selected for the demonstration had to show that they could meet the same quality of care standards that apply to the Medicare risk program. Specifically, HCFA required demonstration MCOs to have a quality assurance (QA) and quality improvement program with written policies and procedures, a standing committee structure, patient grievance and appeal systems, and a provider credentialing system (HCFA 1995). HCFA also required demonstration MCOs to prove their ability to manage patient care through such techniques as provider selection, provider profiling, and case management, and to prove their willingness and

²⁷One of these MCOs later withdrew from the demonstration.

ability to report to HCFA on their QA and quality-improvement activities throughout the demonstration.

After the demonstration application and selection process was completed, the BBA was passed. Under its M+C provisions, the act includes numerous changes in the quality requirements for Medicare MCOs. For instance, Medicare MCOs must comply with the Quality Improvement System for Managed Care (QISMC),²⁸ and demonstration MCOs must meet the same quality and utilization management requirements under QISMC as other M+C organizations. These requirements, effective January 1, 1999, include protecting enrollee rights, informing enrollees of their rights and responsibilities, ensuring access to care and appropriate management of health services, and delegating performance of quality functions to outside entities. The requirements for Quality Assessment and Performance Improvement (QAPI), including minimum performance levels as defined by HCFA and achieving "demonstrable improvement" in two clinical focus areas by conducting performance improvement projects is being phased in incrementally nationwide over a two year period, which began in 1999. All M+C organizations (including the demonstration MCOs) were required to submit an action plan to HCFA by February 8, 1999 detailing how they intended to comply with the new QISMC requirements by the end of that year.

The demonstration MCOs use the same QA and utilization management (UM) techniques as traditional HMOs. As several MCO officials noted, when an MCO begins following NCQA and HEDIS guidelines, it operates in much the same way as a traditional HMO, regardless of its sponsorship. But while the QA and UM techniques and mechanisms are the same, several provider-sponsored MCOs believe there is an important difference between themselves and traditional HMOs in terms of the culture surrounding or the approach to quality of care and care management. They

²⁸Guidelines for implementing the QISMC requirements were released in September 1998.

feel that they have a more direct or closer relationship with providers, and this “partnership” facilitates the implementation of quality assurance programs. Despite this close relationship, however, a number MCOs commented that it was still difficult to get providers to change care patterns or to “buy in” to case management.

1. QA and UM Methods

The types of QA and UM programs vary little across the demonstration MCOs. All the MCOs use concurrent review, discharge planning, and case management to coordinate care. Almost all MCOs also have, or intend to start, disease management programs, which most commonly focus on diabetes, cardiopulmonary disease, and congestive heart failure. All of the MCOs use a health risk assessment and a combination of other screens to identify high-risk or high-use members who would benefit from case management.

Almost all the demonstration MCOs view these care management programs as essential to success in the demonstration because of their ultimate impact on cost. Nine of the 11 MCOs we visited for a second-time had restructured or strengthened elements of their QA or UM efforts to better manage care. For example, Mount Carmel Health Plan and Crozer-Keystone refined their concurrent review processes. Mount Carmel began using teams of physicians, hospital staff, and MCO UM staff to aggressively manage inpatient care. Crozer-Keystone began relying solely on hospital staff to conduct concurrent review rather than dividing that responsibility between itself and the hospital. This change was made to avoid duplication of effort.

Other MCOs revised their health risk assessment (HRA) process. HRAs are surveys of members’ health status and needs that the MCOs conduct by mail, over the phone, or through home visits. Yellowstone Community Health Plan began using its mail HRA to identify high-risk members who would then receive an in-depth assessment. The in-depth assessment includes a home

visit and an environmental assessment²⁹ by a registered nurse or social worker. SCHP, which schedules a home visit and environmental assessment for all members, brought this function "in-house" after contracting it out for the first year.

Other MCOs expanded their case management program to include a larger percentage of members; refined the screens that identify a member for case management to better capture high-risk individuals; or re-engineered their quality operations to improve communications or to enhance their relationship with providers. For example, Health Partners restructured its quality improvement department to improve communication and accountability.

The most extensive changes in care management programs, which we observed during the second visit, were instituted by Florida Hospital Healthcare System. While the MCO had gathered information from new members through an HRA, it began using a combination of a brief health risk questionnaire and a longer HRA to create a risk profile for each member and to place them in one of four categories. The level of care provided to each category ranged from telephone education on specific diseases to care coordination by telephone to home visits and daily telephone calls. The most intensive care management was provided through a geriatric center, which offered multi-disciplinary services to the most high-risk members. Florida Hospital Healthcare System emphasized the need to adapt its providers' care patterns to incorporate more cost-effective procedures and to invoke a sense of "ownership" for their member lives.

2. Prior Authorization

All demonstration MCOs require prior authorization for certain services, although this set of services varies across MCOs. All MCOs require prior authorization for inpatient hospital stays and

²⁹An environmental assessment is an evaluation of the member's home environment based on their health needs.

home health services. MCOs whose demonstration products do not offer out-of-network coverage also require prior authorization for out-of-network services. Twelve MCOs require prior authorization for certain ambulatory procedures and DME, and eleven require prior authorization for physical, occupational, and speech therapy.³⁰ Nine MCOs require prior authorization for inpatient rehabilitation; six require prior authorization for any rehabilitation services.

At the time of our second site visit, several MCOs planned to or had already revised their prior authorization requirements. Most of them did this to simplify the process or reduce the burden on providers by reducing the number of services that require prior authorization. One MCO transferred responsibility for authorizing DME and home health services to the capitated providers of those services, believed by the MCO to be better equipped to make such determinations.

Peoples Health Network used a particularly innovative self-determination approach that got physicians' buy-in and illustrated to them the importance of prior authorization. The MCO initially had a fairly tight system in which prior authorization was required for almost all procedures. The system was changed to allow physicians to set the structure and requirements. Providers chose to move to an open "honor" system where no procedures required authorization. After a large increase in utilization, the providers realized the need for some prior authorization and worked with the MCO to develop and implement a full, albeit streamlined, prior authorization system.³¹

3. Provider and Member Incentives for Quality

Three MCOs give providers financial incentives to encourage strong performance in terms of quality and utilization. Peoples Health Network, Crozer-Keystone, and UCSD Health Plan all use

³⁰Two MCOs require prior authorization for DME requests above a specific amount.

³¹Previously, physician advisors from each contracted IPA would make authorization determinations. This process involved complicated communications between the provider, Peoples Health Network, and the physician advisor. Under the new authorization system, the MCO's medical staff makes the determination.

quality indicators to determine the distribution of a bonus or surplus. Crozer-Keystone and UCSD also give *members* incentives to be more involved in their own care. While other MCOs also offer member education seminars or other wellness programs, Crozer-Keystone and UCSD both have programs entitled "Healthy Rewards" and offer gift certificates for health-related goods and services or enhanced benefits to members who complete health education classes and obtain preventive care.

4. Issues for Open Network Models

The two demonstration MCOs that do not have a gatekeeper model, St. Joseph's and Independence Blue Cross, have unique issues in quality and utilization management. Both noted that the open network model constrains their ability to change care patterns or meet authorization requirements. Both require members to begin the authorization procedure for service and treatments, a process handled by the provider in other MCOs because of accountability issues.

G. PAYMENT ARRANGEMENTS WITH HCFA AND COLLECTION OF ENCOUNTER DATA

1. Payment Arrangements with HCFA

The MCOs vary in their payment arrangements with HCFA. The initial arrangements, based on the AAPCC system, were replaced by the M+C payment system when the BBA was passed. The M+C system changes how annual increases in the payment rate are calculated changed. In addition, a method of risk adjusting M+C payments using a prospective principal inpatient diagnostic cost group (PIP-DCG) adjuster is being phased in over five years. In 2000, payments are a blend of 90 percent demographic factors and 10 percent PIP-DCG. Demonstration MCOs that did not initially agree to test a risk adjustment methodology are subject to the risk adjustment provisions of the M+C program. The arrangements described below take these changes into account:

- Eight MCOs agreed to receive 95 percent of the AAPCC rate during their first year of operations, and then have their M+C rates adjusted on the basis of the prospective Hierarchical Coexisting Conditions (HCC) model for the subsequent years.³²
- One MCO (Florida Hospital Healthcare System) agreed to receive 95 percent of the AAPCC adjusted by the concurrent HCC model for the first year of the demonstration. The MCO negotiated new arrangements with HCFA allowing it to use the PIP-DCG model for its second and final year in the demonstration.
- Two MCOs (Mount Carmel Health Plan and Yellowstone Community Health Plan) agreed to receive 95 percent of the AAPCC/M+C rate for each year of the demonstration. Under the M+C system, these MCOs will be subject to risk adjustment beginning in 2000.
- One MCO (Health Alliance Medical Plans) agreed to receive 95 percent of the AAPCC/M+C rate for a portion of its service area and a blended rate equal to 70 percent of the AAPCC/M+C rate plus 30 percent of the USPC for another portion of its service area for each year of the demonstration. If the M+C rate is higher than the blended rate the MCO contracted for, the MCO will receive the M+C rate.³³
- One MCO (UCSD Health Plan) agreed to receive 95 percent of the AAPCC/M+C rate for Part B services for each year of the demonstration. This MCO agreed to receive 95 percent of the AAPCC/M+C rate for Part A services until it began submitting encounter data, at which time it would begin receiving Part A payments equal to half of what it would have received under the AAPCC/M+C rate system plus half of what it would have received in FFS payments for the Part A services used by its enrollees.

None of the MCOs have had their payments adjusted through the HCC model because of delays in submitting encounter data (discussed below). However, payments to Florida Hospital Healthcare System have been settled using the PIP-PCG model. All MCOs whose payment arrangements with HCFA involve risk-adjustment under the HCC model also agreed to a risk corridor that places a "ceiling" and a "floor" on the amount of risk the MCO (and HCFA) have assumed. All of these MCOs (except Crozer-Keystone) have a 10 percent risk corridor, which ensures that the HCC-

³²The eight MCOs are SCHP, St. Joseph's, Health Partners, Independence Blue Cross, Crozer-Keystone, Ohio Health Alliance, Peoples Health Network, and Memorial Sisters of Charity.

³³The portion of this MCO's service area where the blended rate was to apply had relatively low AAPCC rates. The opportunity to receive this blended rate is what attracted this MCO to the demonstration.

adjusted payments will not differ by more than 10 percent from the payments it would have received under the standard Medicare rates. Crozer-Keystone has a 5 percent risk corridor for 1998 and no corridor for the remaining years of the demonstration. However, in Fall 1999, HCFA gave all of the risk-adjusted MCOs the option of receiving a 90/10 blended percentage from 1998 through 2000 (with 90 percent of the payment based on the M+C demographic risk factors and 10 percent based on the diagnostic risk factors). MCOs being paid according to the prospective HCC model are receiving an interim payment based solely on demographic factors. The payment will be retroactively adjusted once encounter data is available. After 2000, the blend percentages in the M+C program will be used.

2. Collection of Encounter Data

All MCOs participating in the demonstration are required to submit encounter data for all Medicare services received by their enrollees.³⁴ However, the process of submitting data has been plagued by significant problems, delaying the application of the HCC payment methodology and frustrating the MCOs.

a. Status of Encounter Data Submission

MCOs vary in terms of the progress they have made in submitting encounter data to the fiscal intermediaries (FIs) and carriers. As of April 2000, all MCOs had at least begun "testing" the submission of all types of encounter data, and 10 of the 13 MCOs are "in production" for at least one type of data (Table III.8). "Testing" means that the MCOs have developed the processes to submit data to the FIs and carriers but that they are still have problems coding the data or with missing data that prevent the data from passing through the FI/carrier checks. Being "in production" means the

³⁴Encounter data are also required for expanded Medicare benefits offered by the MCOs, such as inpatient and SNF days that exceed Medicare limits, and physician visits for physical exams.

data has passed through the FI/carrier checks and HCFA's checks to reach the National Claims History File. However, it does not mean that the data are necessarily complete or accurate.

Table III.8 presents the status of the MCO's encounter data submission as of April 2000. Of the five MCOs that withdrew from the demonstration, all but Ohio Health Alliance are continuing to submit production files of encounter data. Eight MCOs are in production for Part A data, nine are in production for Part B data, and six are in production for DME data.³⁵

According to the most recent oversight report on the data submission process, the following MCOs appear to have made the most substantial progress in submitting data: Florida Hospital Healthcare System, Health Alliance Medical Plans, Yellowstone Community Health Plan, Crozer-Keystone, Peoples Health Network, and Health Partners (MEDSTAT 2000). The first three of these MCOs account for 63 percent of all encounter records processed as of January 2000.

The MCOs did not substantially change how they collect encounter data over the course of the demonstration. Ten of the 13 MCOs process the data internally, while three contract with outside vendors. Of the 10, Health Alliance Medical Plans originally used a vendor but brought all "backroom functions", including encounter data submission, in-house because the vendor did not process claims on time. One other MCO, Health Partners, indicated that it intended to begin outsourcing encounter data processing in the future.

At the time of our second site visit, no MCOs had changed the format in which they collect encounter data – 3 receive a portion of their encounter data electronically, and 10 receive data only in hard-copy format. Three MCOs (Mount Carmel Health Plan, Memorial Sisters of Charity, and Yellowstone Community Health Plan) indicated that although the systems were not in place at the time of our visit, they intended to begin receiving electronic encounter data from providers in the

³⁵Information on encounter data status was obtained through conversations with MedStat staff.

TABLE III.8

ENCOUNTER-DATA PROCESSING AND SUBMISSION

MCO	Provider Submission to MCO	Submission Incentives for Physicians ^a	MIS for Encounter Data	Submission Status as of April 6, 2000 ^b		
				Part A	Part B	DME
Crozer-Keystone	Hard copy	All FFS	Outsourced	Production	Production	Production
Florida Hospital Healthcare System	Hard copy	Distribution of PCP withhold based in part on report cards; specialists paid FFS ^b	In house	Production	Production	Production
Health Alliance Medical Plans	Physicians--mostly electronic; others--hard copy	None	Outsourced	Production	Production	Production
Health Partners	Hard copy	None	In house ^c	Production	Production	Production
Independence Blue Cross	Hospitals--electronic; others--hard copy	All FFS	In house Part A; outsourced Part B	Test	Production	Test
Memorial Sisters of Charity	Hard copy	Most are paid FFS; no incentive for capitated physicians	In house	Production ^d	Test	Test
Mount Carmel Health Plan	Hard copy	All FFS	In house	Test	Test	Test
Ohio Health Alliance	Hard copy	All FFS	In house	Test	Test	Test
Peoples Health Network	Hard copy	Submission of encounter data one factor in determining PCP bonuses; specialists are paid FFS	In house	Production	Production	Production

TABLE III.8 (continued)

MCO	Provider Submission to MCO	Submission Incentives for Physicians ^a	MIS for Encounter Data	Submission Status as of April 6, 2000 ^b		
				Part A	Part B	DME
SCHP	Hard copy	Most are FFS	Outsourced	Test	Production	Test
St. Joseph's	Hard copy	All FFS	Outsourced	Test	Test	Test
UCSD Health Plan	Hard copy	None	In house	Production ^d	Production	Test
Yellowstone Community Health Plan	Hospitals--hard copy; physicians--electronic; Others--hard copy	Report cards	In house	Production	Production	Production

^aAll MCOs have included in their contracts with providers a requirement that the providers submit encounter data. The submission incentives shown in this table refer to any additional incentives for providers to comply.

^bProduction means that data have been through the FI/carrier and HCFA edits, and have reached the National Claims History File.

^cDuring our second site visit, Health Partners indicated that it had plans to out-source this function in 1999.

^dIn production for Part A inpatient data only.

future. In contrast, Peoples Health Network decided not to receive data electronically because of concerns over possible Y2K difficulties.

The MCOs neither introduced new incentives to encourage providers to submit encounter data nor sanctioned providers who failed to submit data. The most common incentive for submitting encounter data is paying providers FFS. Nine of the 13 MCOs pay at least a portion of their providers FFS. Most MCOs that capitate all or some of their providers rely solely on contractual requirements to ensure that they are receiving all encounter data, and two MCOs (Mount Carmel Health Plan and SCHP) indicated that they will strengthen the contract language to improve encounter data submission. In addition to using contractual requirements, Florida Hospital Healthcare System and Peoples Health Network also consider encounter data submission in distributing PCP withholds or bonuses. Yellowstone Community Health Plan, which does not use either withholds or bonuses, uses encounter data to construct measures for provider report cards.

b. MCO's Difficulties in Collecting Encounter Data

The demonstration MCOs have had considerable difficulty supplying encounter data that is in the correct format and that contains all required information to the FIs and carriers. They have had problems communicating with the FIs and carriers and producing the required provider file. From the MCOs' perspective, these problems stem largely from the unique nature of their efforts. That is, when most of them began submitting encounter data to the FIs and carriers, they were the only organizations submitting information other than claims data to entities designed solely to adjudicate FFS claims.

A universal complaint from the MCOs is that they are required by the FIs and carriers to behave like providers rather than managed care organizations. Many MCOs indicated that they were required to collect data that they did not need to adjudicate internal claims and that obtaining this

information was often difficult. For example, many MCOs had trouble obtaining the assigned supplier numbers of DME suppliers because suppliers view these numbers as secure information and have been instructed to safeguard them to prevent fraud and abuse.

MCOs also noted that some requirements apply to making coverage decisions under FFS Medicare but are not necessary for risk adjustment. For example, the DME carrier Palmetto requires certificates of medical necessity (CMN) as part of DME encounter data submission for three types of services.³⁶ Several MCOs said that obtaining the CMN information is both burdensome and unnecessary, since MCOs use prior authorization to ensure that services meet medical necessity standards. While necessary under FFS, CMNs do not contribute information to the risk adjustment process.

As they work through these issues with their FIs and carriers, the demonstration MCOs have found that their relatively small size has made that process challenging. The MCOs often rely on HCFA to give "weight" to their needs and to facilitate communication with the FIs and carriers. Without HCFA's intervention, MCOs have found that FIs and carriers fail to understand the differences between information submitted under the demonstration and other claims submissions they receive. The results of this problem range from frustration to more severe consequences. For instance, one MCO learned that its providers were receiving error reports that it should have received because the FI could not distinguish between an individual provider and an MCO. Even more problematic, a carrier recommended that a provider refer an MCO for fraud investigation for double-billing Medicare because it did not recognize that the MCO was submitting encounter data rather than claims data.

³⁶HCFA required CMNs only for drugs that are required for the effective use of DME. CMNs for such drugs contain the dosage, which is needed by HCFA for pricing the encounter.

In addressing these and other data-related issues, the demonstration MCOs identified several opportunities to facilitate the submission process. For instance, they found it helpful to have one contact person at the FI or the carrier who is familiar with the demonstration and encounter data issues. Initially, the demonstration MCOs used a general helpline to obtain information and found it difficult to resolve formatting and submission issues since the helpline staff were trained to answer questions about claims, rather than encounter, submissions. In addition, if the MCOs could receive a list of FI/carrier and HCFA edits, they would be able to interpret error reports, identify errors before submitting data, and make the necessary system changes in advance.

c. Impact of Encounter Data Difficulties on Demonstration MCOs

All 12 MCOs that had started to submit encounter data at the time of our site visit noted that the process requires additional effort on their part.³⁷ While one MCO characterized that effort as "not unreasonable," the rest felt it was "significant" or "heavy," and two described it as "extreme" or "ridiculous." Despite the severity of this burden, several MCOs noted that encounter data submission is worthwhile if, as a result, they receive more accurate payments from HCFA. However, the continued difficulties and "band-aid" attempts to use Medicare's FFS system to process managed care data frustrated the MCOs who are eagerly anticipating the implementation of risk adjusters. Seven MCOs strongly believed that they were being adversely selected and that risk adjustment would result in higher payments from HCFA.

In addition to the financial impact of data submission on the MCOs, several of them noted that the delays in risk adjustment have been problematic for provider relations. MCOs who transfer

³⁷St. Joseph's had not begun testing encounter data submission at the time of our first and only site visit in November 1998. The MCO is one of three that withdrew from the demonstration at the end of 1999. We did not conduct second-round site visits to MCOs that announced their intention to withdraw after fewer than 16 months in the program.

downstream risk to their providers said that the delays would interfere with distributing or retrieving money under their capitation or risk pool system should HCFA's payments to the MCO be retroactively risk adjusted several years later than anticipated. In addition to such technical difficulties, one MCO believes that the delays undermined the providers' confidence in the payment structure, further complicating its relationship with capitated providers.

H. FINANCIAL PERFORMANCE AND UTILIZATION EXPERIENCE

Given the substantial start-up costs necessary to develop a new product, and in the case of six demonstration MCOs, a new managed care organization, all of the MCOs anticipated losing money in the first several years of operation. Heavy losses forced five of the MCOs to withdraw from the demonstration (see Section I for further detail on withdrawals). The other MCOs experienced financial losses that were closer to expectations. The burden of these financial losses was aggravated by the uncertainty caused by the delay in risk adjustment.

The MCOs identified several factors that affected their financial viability in the demonstration, including utilization experience, enrollment levels, risk adjustment, administrative burden, and product design. The MCOs' utilization experience varied substantially from higher than projected to lower than projected. The MCOs with high utilization all believed they were being adversely selected, while only one of the MCOs with low utilization felt this way. For four MCOs, pharmacy utilization and costs were a concern, while for others, high inpatient utilization, as reflected in numerous admissions and bed days was a concern. The five MCOs that offered an out-of-network benefit did not have problems managing the benefit. Three of those MCOs reported that utilization of the out-of-network benefit was lower than anticipated.

At the time of our second site visit, eight of the MCOs said their enrollment levels were lower than they had anticipated; in one case, it was as low as 17 percent of the enrollment the MCO had

hoped to see. Five of these MCOs cited low enrollment as a key factor affecting their current financial performance. Three MCOs had higher and/or more rapid enrollment than anticipated; for example, Mount Carmel Health Plan's enrollment was 50 percent higher than projected. Two other MCOs, however, found rapid enrollment to be problematic because they did not have the administrative systems in place to handle the influx of applications or to begin managing care.

A majority of MCOs felt that it was theoretically possible to be successful under the terms of the demonstration but that several key factors could interfere with success. In particular, the demonstration MCOs were concerned about payment levels and about the fact that payment increases were not keeping up with medical inflation; that the administrative tasks and compliance requirements would continue to increase with no additional funding; and that administration and start-up were costly. Concerns about payment and administrative/compliance issues have been voiced by many M+C MCOs, but the issue of administrative and start-up costs is particularly relevant to provider-sponsored MCOs, especially those that may form specifically to participate in the M+C program. The CEO of one MCO noted that while it is possible to run a successful managed care organization sponsored by a provider group, many organizations attempting to do so are unprepared for the administrative and operational costs associated with developing and maintaining an MCO. In the following section, we discuss why five of the provider-sponsored MCOs withdrew from the demonstration.

I. MCO WITHDRAWALS

Two demonstration MCOs withdrew as of January 1999, three withdrew as of January 2000, and one withdrew in April 2000 (see Table III.9). These six MCOs participated in the demonstration for different lengths of time, ranging from 18 months for Ohio Health Alliance to 33 months for Crozer-Keystone. Florida Hospital Healthcare System had the largest enrollment, with more than

14,000 members in November 1998. None of the other withdrawing MCOs had more than 7,500 members at any point during their time in the demonstration.

Exits from the Medicare managed care program are not unique to the demonstration MCOs. In 1999, 43 MCOs, or 12 percent of contracting MCOs, withdrew from the M+C program. The situation was similar in 2000, when 41 MCOs (14 percent) chose not to renew their M+C contracts. In both years, nonrenewing MCOs had significantly smaller enrollments than renewing MCOs, with renewing contracts having between four and six times as many members. Contracts that were not renewed had been held for a somewhat shorter time than those that were renewed (Nelson et al. 2000).

The decision by demonstration MCOs to exit the program is of particular interest because one goal of Medicare+Choice was to encourage provider-sponsored MCOs to participate in the Medicare program. Only one provider-sponsored MCO has entered the M+C program under the new PSO regulations. As detailed below, we spoke with key staff from five MCOs that withdrew from the demonstration about their experience in the demonstration and their decision to withdraw.³⁸

1. Reasons for MCO Withdrawals

All five MCOs that withdrew from the demonstration did so because they incurred large, unsustainable financial losses. One MCO attributed its difficulties to poor product design, but four cited inadequate payments from HCFA as a key reason for financial losses. Uncertainty in payment due to legislative changes in the calculation of payment rates, delays in risk adjustment, and variation in payment rates by county were all thought to be contributing factors. Of the five MCOs that

³⁸SCHP's demonstration contract with HCFA was terminated in April 2000. We were unable to schedule an exit interview with this MCO. This discussion is based on interviews with the other five withdrawing MCOs.

withdrew, one was at the floor payment level, and the other four served markets with payment rates ranging from 5 percent below the USPCC to 27 percent above the USPCC (see Table III.9). The two withdrawing MCOs serving markets with the lowest payment rates, Yellowstone Community Health Plan and Ohio Health Alliance, regarded the low payment levels as particularly problematic. For the other MCOs, the reduced growth in rates, especially as compared with rising medical costs, was a great concern. MCOs were also concerned about the delay in implementing risk adjustment and the uncertainty over its eventual outcome.

The MCOs noted that their financial difficulties were aggravated by the increased administrative and reporting requirements instituted under the BBA. Finding the staff and resources necessary to comply with QISMC, PIP, HEDIS, and other requirements added to the MCOs' already high start-up costs. And as mentioned, the effort of collecting encounter data, also a reason for withdrawal, was described as "incredibly resource intensive," "cumbersome," and "overwhelming." One MCO said that the "BBA requirements broke the camel's back," noting that the \$1.31 marketing charge assessed per member per month to support the national effort to educate Medicare beneficiaries about Medicare+Choice was more money than that MCO allocated per member for mental health services.

Three of the withdrawing MCOs specifically mentioned high utilization as contributing to their decision to withdraw. They believed their high number of inpatient bed days, long hospital stays, and high pharmacy costs stemmed from three factors: adverse selection, pent-up demand, and inability to rapidly change care patterns. These three MCOs all felt that they were attracting sicker patients with higher utilization because of the sponsorship of high-profile, reputable provider systems (often tertiary care centers). Despite these difficulties, the withdrawing MCOs believed they were making progress toward their utilization goals but that financial pressures would not give them enough time to meet them.

TABLE III.9

MCOs THAT WITHDREW FROM THE MEDICARE CHOICES DEMONSTRATION

Market/MCO	Term in the Demonstration	Number of Months in the Demonstration	Maximum Enrollment (month, year)	Ratio of 1999 M+C Payment Rate to USPPC	Number of Risk MCOs in Market		Number of Risk Contract Nonrenewals in Market	
					9/98	9/99	1999	2000
Atlanta, GA								
SCHP	12/1/97 - 4/30/00	29	7,346 (4/00)	1.16	7	7	0 ^a	1
St. Joseph's	6/1/98 - 12/31/99	19	3,316 (6/99)	1.08	7	7	0 ^a	1 ^b
Billings, MT								
Yellowstone Community Health Plan	7/1/97 - 12/31/99	30	2,570 (9/99)	.79	1	1	0	1
Columbus, OH								
Ohio Health Alliance	7/1/97 - 12/31/98	18	6,951 (11/98)	.95	6	5	1 ^b	0 ^a
Philadelphia, PA								
Crozer-Keystone	4/1/97 - 12/31/99	33	3,810 (8/99)	1.27	7	6	1	2
Orlando, FL								
Florida Hospital Healthcare System	2/1/97 - 12/31/98	23	14,376 (11/98)	1.11	9 ^c	7	2	1 ^a

^aOne M+C organization also withdrew from a portion of the MCO's service area.

^bTwo M+C organizations also withdrew from a portion of the MCO's service area.

^cIn September 1998, there were 10 risk contracts serving counties in Florida Hospital Healthcare System's service area. However, one contract was held by a national MCO, which had recently acquired the MCO holding another of the risk contracts.

Two MCOs, St. Joseph's and Ohio Health Alliance, cited their product design as a key problem in maintaining financial viability, thus influencing the decision to withdraw. Both noted that the individuals who designed their products were trying to meet beneficiaries' needs without fully comprehending their behavioral responses, the response of providers, or the cost consequences. As discussed earlier, St. Joseph's did not contract with physicians, allowed its members to see any physician in its service area accepting Medicare assignment, and paid physicians Medicare FFS rates. This arrangement left St. Joseph's without a mechanism for controlling costs, since it could not achieve savings on physician services through price discounts, and it had no leverage to influence physician practice patterns. It is therefore not surprising that St. Joseph's was not financially viable under the demonstration. Ohio Health Alliance offered two products, a zero premium product with a \$600 annual prescription drug benefit and a product with a \$15 monthly premium that included a \$1,500 annual drug benefit and a few other enhanced benefits. The MCO found that this benefit design led to adverse selection into the richer benefit package, which had a major impact on its total costs.

The other withdrawing MCOs felt that their original products were designed with the needs of beneficiaries and providers in mind, so they were hesitant to make change the design. One MCO in particular noted that it did not "fit well with this culture" to cut benefits or reduce payments to providers just to survive.

2. Making the Decision to Leave

The demonstration MCOs recognized that there was a substantial up-front cost to entering the Medicare market. However, the original break-even estimates were pushed out over time as administrative requirements were added, encounter data collection costs escalated, enrollment figures were not met, or utilization was greater than expected. The MCOs felt that their sponsoring provider

systems were largely supportive—most notably by providing capital to keep them afloat—but they became increasingly skeptical about when or if the Medicare product would support itself. Most MCOs felt that the expected risk adjustment would benefit them but ultimately had to set a limit on the amount of risk they could expose their sponsoring provider system to; in addition, the sponsors had to determine their willingness to risk their core business of delivering health care services in order to sustain the MCO.

The timing and breadth of requirements under the BBA played an important role in shaping the demonstration experience. All of the MCOs that left the demonstration felt that the BBA transferred what was unique about the demonstration to the risk-based Medicare program. The demonstration MCOs no longer merited special consideration relative to such issues as encounter data submission, and so the advantages of being part of the demonstration were diminished. Several withdrawing MCOs felt that the demonstration had not been appropriately “nurtured,” and that they lost an opportunity to both partner with HCFA and show what provider-sponsored MCOs could do.

The provider-sponsored MCOs struggled with the decision to leave because most had strong ties with the community and their members. In all cases, MCOs reported that they “examined every scenario” to make it work but could not create a viable product that was acceptable. Providers and their staff felt that they entered the demonstration for good reasons, primarily to provide better care through an MCO that is supportive of members and providers. Withdrawing MCOs reported that most of their members had pre-existing relationships with providers, felt they were being taken care of, and were losing benefits that they could not or could only marginally afford otherwise. Consequently, beneficiaries were very disappointed when MCOs chose to exit the market.

IV. DISENROLLMENT, BIASED SELECTION, AND EFFECTS ON MEDICARE COSTS

In this chapter, we present our findings on disenrollment rates, biased selection, and effects on Medicare costs. It is important to examine disenrollment for two reasons in particular. First, high rates of disenrollment may be an indicator of beneficiary dissatisfaction with the care provided by the newer types of MCOs; second, high rates relatively soon after beneficiaries join an MCO could be an indicator that they had a poor understanding of the MCO and its product at the time of enrollment. It is important to assess the nature and extent of biased selection because it tells us whether the newer types of MCOs in the demonstration and their products attracted a more representative mix of beneficiaries than has been attracted to Medicare HMOs. If so, future participation in Medicare by such MCOs could offer beneficiaries a more meaningful and desirable choice of health plans, which could raise enrollment in the M+C program.

One of the original goals of the demonstration was to test new risk-based payment methods, including new risk adjusters. However, the MCOs have not been able to submit the encounter data required to implement the new payment methods. Therefore, they have been paid under the M+C payment system. To assess the implications of biased selection for Medicare program costs, we compared the capitation payments received by the MCOs with an estimate of the payments their enrollees would have incurred for Medicare had they been covered under FFS.

We found that 13 percent of demonstration enrollees disenrolled within 12 months after joining their MCO. Disenrollment rates varied substantially across MCOs, ranging from 5 percent to 28 percent. On average, the disenrollment rate in MCOs with a POS product was nearly twice as high as in MCOs with no out-of-network coverage. Overall, the demonstration MCOs experienced favorable selection, although to a substantially lesser extent than has been reported for Medicare

HMOs. The direction and magnitude of biased selection varied significantly across MCOs, which likely reflects variation in product design, sponsorship, market area characteristics, and marketing strategy. MCOs with POS products were less likely to experience favorable selection than MCOs with no out-of-network coverage. Overall, the demonstration did not have a significant effect on Medicare program costs.

A. PRIOR RESEARCH

There is considerable evidence that Medicare risk plans experience favorable selection. The research shows that beneficiaries who enroll in such plans are healthier on average than those who do not enroll, even after controlling for differences between the two groups in terms of the demographic risk factors in the AAPCC (now M+C) payment mechanism. In the best available studies, researchers have concluded that, because of favorable selection, HCFA spends about six to seven percent more on Medicare risk enrollees than it would have spent had they remained in FFS Medicare (Brown et al. 1993; Riley et al. 1996).

In other studies, researchers have assessed the degree of biased selection in Medicare risk plans by comparing enrollees and FFS beneficiaries in terms of prior expenditures, prior hospitalizations for high-cost conditions, prevalence of chronic conditions, mortality rates, and self-reported measures of health and functional status. The great weight of evidence from this work supports the conclusion that risk plans experience favorable selection. For example, after adjusting for differences between enrollees in risk plans and FFS beneficiaries in their distribution across AAPCC rate cells, Hill and Brown (1990) found that prior expenditures for enrollees in risk plans in 1988 were 23 percent lower than for FFS beneficiaries in the plans' market areas. Similar results have been reported for risk plans participating in demonstration projects before the Medicare risk program was implemented (Brown 1988; Eggers and Prihoda 1982).

Studies also show that enrollees in risk plans are less likely than nonenrollees to have been hospitalized for high-cost conditions before they enrolled (Hill and Brown 1990) and less likely to have been treated for certain chronic conditions (GAO 1997). Moreover, after adjusting for differences in AAPCC demographic risk factors, researchers have found that enrollees in risk plans have significantly lower mortality rates than FFS beneficiaries (Riley, Lubitz, and Rabey 1991; Brown 1998) and that they reported themselves to be in better health (Riley et al. 1996; Hill and Brown 1992).

Most of the research shows that beneficiaries who disenroll from risk plans are in worse health than those who remain, further contributing to favorable selection. For example, Morgan et al. (1997) found that disenrollees from risk plans in south Florida had a hospital admission rate during the first three months following disenrollment that was 80 percent higher than that of FFS beneficiaries in the local market area. In contrast, before they enrolled in risk plans, enrollees (including those who later disenrolled) had an admission rate that was about one-third lower than that of the FFS group.¹ GAO (1997) found that HMO enrollees with multiple chronic conditions were more likely than healthier enrollees to disenroll within six months, and that those who disenrolled within six months had higher prior costs than those who remained enrolled for at least six months. Other evidence that less healthy beneficiaries are more likely to disenroll from risk plans has been reported by Hill and Brown (1990) and Riley, Lubitz, and Rabey (1991).

The studies cited above were conducted between the early 1980s and 1994, when Medicare managed care penetration rates were relatively low. In later work, Call et al. (1999) found that although favorable selection becomes less persistent as market penetration increases, it does not disappear. Thus, the degree of favorable selection may have declined from the levels reported in the

¹For each of these estimates, the authors controlled for differences between enrollees and nonenrollees in age, sex, race, and mean income in the beneficiary's zip code.

earlier research. In addition, certain provisions of the M+C program are expected to influence the degree of biased selection in the program. For example, the modification of the payment mechanism to include risk adjusters that account for health status may reduce favorable selection by making it more profitable for plans to enroll and retain beneficiaries with chronic conditions.

B. RESEARCH QUESTIONS

In this chapter, we addressed the following key questions about the decision to enroll in the demonstration and about the effects of the demonstration on Medicare program costs.

- What are the characteristics of beneficiaries who enrolled in the demonstration, and do they differ from those who remained in FFS Medicare? Did the MCOs experience biased selection?
- What percentage of beneficiaries disenrolled, and why?
- How do beneficiaries who disenrolled compare with those who remained enrolled? Did the MCOs experience biased disenrollment?
- How do the capitation payments made by Medicare for demonstration enrollees compare with the Medicare payments that would have been made for them in the FFS sector?

We addressed each of these questions for the entire demonstration, for individual MCOs, and for MCOs classified by type of product offered. We were particularly interested in determining how the outcomes varied across MCOs. For example, did the nature and extent of biased selection experienced by the MCOs differ by type of product offered and by other elements of the benefit package? In general, MCOs offering PPO and POS products would be expected to experience less favorable selection than those with no out-of-network coverage, since the out-of-network coverage should appeal most to beneficiaries in poorer health because they, more than other beneficiaries, would be expected to value the freedom to self-refer. However, this expected selection effect may

have been mitigated by the limitations some MCOs placed on the number and types of services for which enrollees could self-refer and by the much higher cost sharing for out-of-network services.

C. ENROLLMENT IN AND DISENROLLMENT FROM THE DEMONSTRATION

The following discussion of enrollment in and disenrollment from the demonstration covers beneficiary enrollment history, beneficiary characteristics, reasons for enrolling, disenrollment rates, and reasons for disenrolling.

1. Beneficiary Enrollment History

In this discussion of beneficiary enrollment history, we report on the percentage of beneficiaries who enrolled in the demonstration soon after becoming eligible for Medicare and the percentage who were previously enrolled in a Medicare managed care plan. We conducted this analysis of enrollment history on the total enrollee sample, which consists of all beneficiaries who were enrolled in a demonstration MCO on or before December 1, 1998. The total enrollee sample was also used for the disenrollment analysis presented below in section C.4. All other analyses in this chapter were conducted on either the claims-based sample or the survey-based sample.

Thirteen percent of demonstration enrollees joined their MCO within six months after becoming eligible for Medicare (see Table IV.1). Independence Blue Cross had by far the highest percentage of such enrollees (25 percent). These findings indicate that Independence, having positioned itself in the marketplace as a lower cost alternative to traditional Medigap insurance, successfully enrolled a significant number of newly eligible beneficiaries making their first decision regarding Medigap coverage. Independence may owe its success to its strategy of designing its demonstration product to resemble its commercial PPO product in order to attract enrollees who "aged out" of the commercial product upon becoming eligible for Medicare.

TABLE IV.1
ENROLLMENT HISTORY OF DEMONSTRATION ENROLLEES
(Percentages)

MCO	Number of Enrollees	Enrolled within 3 months After Becoming Eligible for Medicare	Enrolled within 6 months After Becoming Eligible for Medicare	Had Prior Medicare MCO Enrollment	Switched from Another Medicare MCO to Demonstration MCO
All MCOs	78,758	9.7	12.5	29.8	25.5
PPO/EPO Product					
Independence Blue Cross	9,544	19.5	24.5	12.3	8.0
St Joseph's	2,689	5.0	7.3	13.3	8.4
POS Product					
Crozer-Keystone	4,189	6.0	8.1	43.8	40.0
Memorial Sisters of Charity	12,904	7.4	9.9	46.8	42.1
People's Health Network	3,654	6.4	8.6	40.3	35.6
SCHP	3,074	5.5	8.3	29.4	25.9
No Out-of-Network Coverage					
Florida Hospital Healthcare System	16,160	11.3	13.8	44.6	38.0
Health Alliance	4,037	8.3	10.0	4.6	1.7
Health Partners	3,056	5.1	9.3	22.8	17.4
Mount Carmel	9,628	9.3	11.7	17.5	15.4
Ohio Health Alliance	7,225	8.6	11.3	20.0	18.0
UCSD	519	5.0	7.3	69.9	61.7
Yellowstone	2,079	10.2	12.5	4.5	2.1

NOTE: The estimates in this table were obtained for the entire population of Medicare beneficiaries who were enrolled in the demonstration MCOs on or before December 1, 1998.

Thirty percent of demonstration enrollees were enrolled in a Medicare managed care plan before the demonstration, and one-quarter of them switched directly from another Medicare MCO to a demonstration MCO. The proportion of enrollees who switched from another MCO varied with two factors: (1) the extent to which other pre-existing Medicare managed care options had penetrated the market before the demonstration and (2) the demonstration MCOs' benefit design and marketing strategy. The percentage who switched from another MCO varied from 2 percent in Health Alliance and Yellowstone, where there were no other Medicare managed care options, to 62 percent in UCSD, where the Medicare managed care penetration rate was over 45 percent.² Among Philadelphia's MCOs, the proportion of enrollees who switched from another MCO ranged from 8 percent in Independence Blue Cross to 40 percent in Crozer-Keystone. The low proportion of switchers in Independence is consistent with this MCO's product design and marketing strategy, since its PPO product was designed to appeal to beneficiaries who had not been attracted to Medicare HMOs.

For MCOs in which a large fraction of enrollees were new to Medicare or had switched from another MCO, the claims-based biased selection analysis presented later in this chapter gives an incomplete picture of biased selection. Because the sample for that analysis was restricted to beneficiaries covered by FFS Medicare throughout the one-year baseline period, we excluded beneficiaries who enrolled soon after becoming eligible and those who switched from another MCO. Thus, at least 69 percent of UCSD enrollees were excluded from the analysis, as were over 35 percent of the enrollees in four other MCOs: Crozer-Keystone, Memorial Sisters of Charity, Florida Hospital Healthcare System, and Peoples' Health Network. Such enrollees were included in our survey-based analysis of biased selection, since we did not restrict the survey sample to beneficiaries who were in FFS Medicare throughout the baseline period. The findings from the analysis of the

²Enrollees who switched from another MCO into Health Alliance and Yellowstone moved from another geographic area where Medicare managed care was available.

survey data therefore provide a means of assessing whether the exclusion of a large percentage of enrollees from the claims-based analysis for some MCOs affected the findings of that analysis.

2. Characteristics of Enrollees and Nonenrollees

Enrollees were less likely than nonenrollees to be under 65 and disabled, age 85 and over, and on Medicaid (see Table IV.2). This pattern was true for most MCOs, with a few exceptions, and is consistent with prior studies of Medicare risk enrollees (Brown et al. 1993, Nelson et al. 1996). The most notable exception was Health Partners, which had previously operated as a Medicaid HMO and targeted dual eligibles in the demonstration. Nearly two-thirds of Health Partners' enrollees were on Medicaid, and one in five were eligible for Medicare because of a disability. In contrast, Independence Blue Cross attracted the smallest percentage of both dual eligibles and the under 65 disabled of any MCO (1 percent and 4 percent, respectively). This is not surprising, since Independence charged a relatively high premium and had a limited drug benefit.³

The survey data reveal that enrollees were less educated than nonenrollees, had lower incomes, were less likely to live in a nursing home, and more likely to be married (see Table IV.3). The two groups were similar in their attitudes toward health care. These findings are generally consistent with those reported by Brown et al. (1993) from a survey of Medicare risk enrollees and FFS beneficiaries, except that the earlier study found that risk enrollees were more likely to avoid doctors than FFS beneficiaries and less likely to worry about their health. We compare the health status of enrollees and nonenrollees below in section D.

³The \$500 cap on prescription drugs limits the incentive for dual eligibles to enroll in Independence Blue Cross, since they have unlimited drug coverage under the state's Medicaid program. The other two Philadelphia MCOs, Health Partners and Crozer-Keystone, had a zero premium product with a \$1,500 prescription drug cap.

TABLE IV.2

COMPARISON OF THE CHARACTERISTICS OF ENROLLEES AND NONENROLLEES
(Percentages)

MCO	Enrollment Group	Number of observations	Percent of Sample					Medicaid	Nonwhite
			Age						
			Less than 65	65-74	75-84	85 and over			
All MCOs	Enrollees	44,768	8.3	48.0	35.2	8.4	8.3	16.0	
	Nonenrollees	90,139	11.5	39.7	35.7	13.1	14.9	16.2	
PPO/EPO Product	Enrollees	7,335	6.6	49.6	36.1	7.8	1.9	8.4	
	Nonenrollees	15,000	12.4	39.4	35.3	12.8	15.5	18.1	
Independence Blue Cross	Enrollees	5,353	3.6	46.2	40.5	9.7	0.9	9.8	
	Nonenrollees	11,025	9.9	34.8	39.5	15.8	14.0	19.6	
St. Joseph's	Enrollees	1,982	9.6	52.9	31.6	5.9	3.0	7.1	
	Nonenrollees	3,975	15.0	44.1	31.1	9.8	17.0	16.7	
POS Product	Enrollees	11,713	10.2	43.6	36.3	9.9	13.1	31.5	
	Nonenrollees	23,561	12.2	39.0	35.8	12.9	15.3	21.9	
Crozer-Keystone	Enrollees	2,040	7.0	40.6	41.3	11.1	24.5	30.5	
	Nonenrollees	4,082	7.4	37.9	39.9	14.8	7.8	7.2	
Memorial Sisters of Charity	Enrollees	5,676	10.6	48.6	32.6	8.2	13.7	24.6	
	Nonenrollees	11,417	10.7	42.6	34.3	12.4	15.9	19.8	
People's Health Network	Enrollees	1,939	10.7	43.2	36.1	10.0	6.5	24.3	
	Nonenrollees	3,918	17.0	37.4	33.7	11.9	20.8	31.1	
SCHP	Enrollees	2,058	12.4	41.8	35.3	10.5	7.6	46.6	
	Nonenrollees	4,144	13.9	38.1	35.4	12.7	16.9	29.7	
No Out-of-Network Coverage	Enrollees	25,720	9.2	47.5	35.2	8.1	12.4	16.0	
	Nonenrollees	51,578	12.1	38.9	35.7	13.3	16.8	14.3	
Florida Hospital Healthcare System	Enrollees	7,127	6.0	49.0	36.0	9.0	2.9	9.3	
	Nonenrollees	14,283	11.9	40.7	35.2	12.3	17.2	13.5	
Health Alliance Medical Plans	Enrollees	2,964	5.0	52.5	35.4	7.1	2.6	3.7	
	Nonenrollees	5,994	9.2	38.6	37.9	14.3	9.3	6.0	
Health Partners	Enrollees	1,973	22.3	46.7	25.5	5.4	65.2	77.6	
	Nonenrollees	3,924	12.3	34.3	38.1	15.3	23.1	35.0	
Mount Carmel Health Plan	Enrollees	6,817	7.2	50.6	34.6	7.5	3.7	6.5	
	Nonenrollees	13,687	11.8	41.2	34.8	12.2	13.4	13.6	

TABLE IV.2 (continued)

MCO	Enrollment Group	Number of observations	Percent of Sample					
			Age				Medicaid	Nonwhite
			Less than 65	65-74	75-84	85 and over		
Ohio Health Alliance	Enrollees	5,159	9.0	49.6	33.8	7.6	4.0	4.9
	Nonenrollees	10,335	11.5	41.5	34.5	12.6	13.1	10.8
UCSD Health Plan	Enrollees	136	5.1	41.2	43.4	10.3	7.4	7.4
	Nonenrollees	274	17.5	34.7	35.0	12.8	31.0	17.2
Yellowstone Community Health Plan	Enrollees	1,544	9.8	42.8	37.4	9.9	1.5	2.3
	Nonenrollees	3,081	10.3	41.5	34.7	13.6	10.3	4.2

NOTE: All differences between enrollees and nonenrollees shown in the table are significant at the 0.05 level (two-tailed test) except for the comparison of the percent nonwhite for the demonstration as a whole. We used a chi-square test to test whether the age distribution for enrollees differed from that for nonenrollees.

TABLE IV.3

COMPARISON OF SURVEY CHARACTERISTICS OF
ENROLLEES AND NONENROLLEES
(Percentages)

	Enrollees	Nonenrollees	P-Value
Age			
Less than 65 (disabled)	9.1	11.6	0.00 ^a
65-79	72.1	62.2	
80 or greater	18.8	26.2	
Percent Female	59.6	59.7	0.92
Percent Nonwhite	17.4	16.8	0.54
Percent Hispanic	4.7	3.0	0.00
Years of Education			
Less than 12	33.4	29.4	0.02 ^a
12	35.7	37.8	
More than 12	30.9	32.9	
Percent who live in nursing home	1.1	4.2	0.00
Percent Married	50.4	45.6	0.00
Percent who live alone	31.4	32.3	0.51
Annual Household Income			
Less than \$10,000	21.9	22.5	0.00 ^a
\$10,001 - \$20,000	34.8	29.2	
\$20,001 - \$30,000	18.9	18.1	
More than \$30,000	24.4	30.1	
Percent who avoid doctors	27.0	26.0	0.43
Percent who worry more about their health than others of the same age	24.9	25.7	0.50

^aThe p-values shown for age, education, and income are for chi-square tests of the hypothesis that enrollees and nonenrollees have the same percentage distribution across the defined categories.

3. Reasons for Enrollment

Sixty percent of beneficiaries who enrolled in a demonstration MCO did so primarily for a reason related to lower costs or better benefits (see Table IV.4). Eight percent of enrollees specifically mentioned that prescription drug coverage was their primary reason for enrolling. These results are consistent with those from a 1996 national survey of Medicare risk enrollees, in which beneficiaries were also found to choose to enroll in a Medicare risk MCO most frequently because of the lower costs or expanded benefits (Nelson et al. 1996). The next most common reasons for enrolling were the providers associated with the MCO (cited by 15 percent) and information about the MCO received from salespeople, friends, and other sources (13 percent).

Those who ultimately disenrolled were more likely than continuing (or "current") enrollees to have joined because of information they received about the MCO and less likely to have joined because of the lower costs or greater benefits.⁴ In particular, 15 percent of disenrollees joined primarily because of information received from a salesperson, whereas only 5 percent of current enrollees joined for that reason. This suggests that in some instances, beneficiaries were influenced by a salesperson to enroll in a product that they may not have fully understood. Disenrollees were also more likely to have enrolled because of a recommendation from a friend or relative (9 percent of disenrollees versus 5 percent of current enrollees).

Across MCOs, there is considerable variation in reasons for enrollment. Health Alliance and Yellowstone had the largest proportion joining because of lower costs (68 percent and 56 percent, respectively). This compares to 10 to 42 percent for the other MCOs. Both Health Alliance and Yellowstone were the only Medicare managed care options available to beneficiaries in their market

⁴Current enrollees are beneficiaries who were enrolled at the time of the interview.

TABLE IV.4

BENEFICIARIES' REASONS FOR ENROLLING IN A MEDICARE CHOICES DEMONSTRATION MCO

	All Enrollees	Current Enrollees	Disenrollees	MCOs with Self-Referral Options (a)					MCOs without Self-Referral Options (a)				
				Independence Blue Cross	People's Health Network	Crozer- Keystone	Memorial Sisters of Charity	SCHP	Health Alliance	Health Partners	Mount Carmel	UCSD	Yellowstone Community Health
Percent Citing Most Important Reason As:													
Costs/Benefits	60.4	61.4	50.2**	65.7	50.3	45.6	59.2	69.3	80.8	48.3	63.6	25.6	79.1
Lower Costs	34.5	35.4	23.7**	41.8	31.0	20.5	27.5	28.7	67.5	12.5	38.9	9.9	56.4
More Benefits	16.5	16.6	15.9	16.6	9.6	18.8	15.7	21.2	11.3	27.7	15.7	12.2	16.2
Prescription Drug Coverage	7.6	7.5	8.4	6.3	6.5	5.4	14.1	17.9	0.2	5.5	7.0	3.3	2.6
Needed insurance/had no other insurance	1.9	1.9	2.2	1.1	3.1	0.9	1.9	1.5	1.8	2.6	2.1	.3	4.0
Providers	15.2	15.4	12.7	9.3	24.1	13.3	17.8	10.2	7.1	5.1	41.7	41.7	6.5
Current Doctor was In Plan	6.2	6.4	3.8	4.7	12.7	3.6	7.2	3.5	3.0	1.6	6.9	6.9	0.8
Preferred Doctor was in Plan	5.0	5.0	4.2	3.8	9.1	5.1	6.3	4.0	1.7	1.0	10.1	10.1	2.6
Reputation of Plan Doctors	1.5	1.4	1.8	0.8	0.8	1.6	1.2	0.8	0.5	0.7	13.6	13.6	0.9
Liked Hospitals Available	2.6	2.5	2.9	0.0	1.5	3.0	3.1	1.8	2.0	1.7	11.6	11.1	2.3
Ease of Physical Access	3.2	3.4	1.1**	0.3	2.0	9.0	3.9	1.1	1.8	2.5	8.4	8.4	1.4
Convenient Location	3.1	3.3	1.1**	0.0	1.7	9.0	3.9	1.1	1.8	2.5	8.4	8.4	1.4
Plan Provides Transportation	0.1	0.1	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	.0	0.0	0.0
Information on Plan	13.4	12.3	25.1**	7.8	14.7	23.4	13.6	15.6	7.0	36.1	8.8	14.0	8.4
Recommended by Their Doctor	1.4	1.5	0.5**	1.8	4.6	1.3	0.8	0.5	0.5	2.1	1.2	1.3	0.9
Recommended by Friend or Relative	5.1	4.7	9.3*	4.0	5.0	5.2	6.6	5.1	3.9	10.6	3.3	6.6	4.6
Information from Salesperson	6.2	5.4	15.0**	1.7	4.8	16.0	5.4	7.8	2.3	22.6	3.6	4.8	2.7
Information Received in Mail	0.7	0.7	0.2**	0.2	0.3	0.9	0.9	2.3	0.2	0.9	0.7	1.3	0.3
Other Reasons	7.8	7.5	10.8	16.9	8.9	8.7	5.5	3.9	3.3	8.0	3.4	10.1	4.5
Liked out-of-network coverage	2.5	2.6	1.8	9.3	2.9	0.9	0.8	0.3	0.0	0.4	0.4	4.5	0.0
Paperwork reduction	0.3	0.4	0.0	0.3	0.4	0.3	0.2	0.3	0.5	0.0	0.4	.6	0.5
Option Available Through Retirement Plan	0.8	0.8	1.1	2.0	1.2	2.0	0.3	0.5	0.3	1.0	0.0	.3	1.1
Other	4.1	3.8	8.0*	5.3	4.4	5.6	4.2	2.8	2.5	6.6	2.5	4.7	2.9

TABLE IV.4(continued)

	All Enrollees	Current Enrollees	Disenrollees	MCOs with Self-Referral Options (a)					MCOs without Self-Referral Options (a)				
				Independence Blue Cross	People's Health Network	Crozer-Keystone	Memorial Sisters of Charity	SCHP	Health Alliance	Health Partners	Mount Carmel	UCSD	Yellowstone Community Health
Percent Citing at Least One of Their Reasons As:													
Costs/Benefits	71.1	71.1	51.0**	71.9	61.3	49.1	67.8	80.3	90.2	52.3	77.5	42.9	86.1
Lower Costs	44.4	46.2	25.7**	50.5	39.6	23.5	37.3	44.2	79.6	18.7	52.5	20.7	69.8
More Benefits	28.2	29.0	19.5*	27.9	21.5	24.5	24.2	32.3	26.1	34.3	32.2	24.9	35.0
Prescription Drug Coverage	16.2	16.1	16.7	13.9	16.3	9.1	24.8	32.9	1.0	8.7	19.7	8.0	11.6
Needed insurance/had no other insurance	2.4	2.4	2.0	1.7	3.3	1.9	1.9	2.5	3.1	3.2	2.3	1.1	5.4
Providers	31.4	31.4	17.8**	20.6	39.2	26.7	30.0	23.6	23.7	10.0	42.6	70.0	26.6
Current Doctor was In Plan	12.2	12.9	5.5**	9.8	19.4	9.3	12.4	6.9	9.3	2.9	19.6	15.3	6.5
Preferred Doctor was in Plan	13.3	13.8	8.3*	11.4	21.1	12.1	14.5	10.3	9.4	4.3	16.2	19.3	13.9
Reputation of Plan Doctors	4.6	4.7	3.8	3.9	1.9	4.8	3.9	2.7	2.7	1.4	3.8	31.3	6.4
Liked Hospitals Available	8.6	2.7	4.9*	0.6	6.0	8.1	11.2	7.2	5.5	3.0	15.5	23.4	9.0
Ease of Physical Access	10.3	10.3	2.1**	1.3	7.5	16.9	11.1	4.8	5.5	5.1	15.0	24.0	7.8
Convenient Location	9.3	10.0	2.1**	1.0	7.2	16.9	11.1	4.8	5.5	4.2	14.8	23.5	7.5
Plan Provides Transportation	0.2	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.9	0.2	0.1	0.2
Information on Plan	21.1	21.1	27.8**	13.1	22.2	32.4	21.0	25.7	16.7	38.0	20.1	30.4	16.8
Recommended by Their Doctor	2.5	2.7	0.7**	3.6	5.9	2.1	1.9	1.0	0.9	1.7	2.8	16.3	1.3
Recommended by Friend or Relative	8.6	8.5	10.2	6.5	6.8	7.6	11.0	8.7	8.0	11.8	7.7	12.3	9.4
Information from Salesperson	10.3	9.6	17.6**	2.7	10.0	23.4	7.8	13.5	7.8	25.2	8.9	13.1	6.8
Information Received in Mail	1.9	2.0	0.7	1.1	1.6	1.5	1.8	4.1	1.2	1.0	2.4	6.7	1.0
Other Reasons	13.7	13.7	15.0**	24.3	12.7	15.8	10.5	8.1	10.5	10.7	9.7	19.3	9.9
Liked out-of-network coverage	4.2	4.4	1.8*	13.9	3.3	2.6	2.0	1.0	0.5	0.8	1.0	10.1	0.3
Paperwork reduction	1.0	1.0	0.0	0.5	0.6	0.9	0.2	0.8	2.0	0.0	1.9	2.3	1.7
Option Available Through Retirement Plan	1.4	1.4	1.0	2.7	1.4	2.0	0.9	0.5	1.2	1.2	0.7	.8	1.3
Other	7.7	7.2	12.3	8.4	7.6	10.3	7.7	5.8	7.3	8.7	6.1	7.3	6.7

Notes:

(a) Percentages presented by MCO were calculated for all enrollees (both current enrollees and disenrollees).

**Difference between disenrollees and current enrollees is statistically significant at the .01 level, two-tailed test.

*Difference between disenrollees and current enrollees is statistically significant at the .05 level, two-tailed test.

area, and these beneficiaries were probably comparing the premiums and costs of receiving care in the MCO to the costs associated with Medicare only or Medicare plus Medigap.

UCSD had the lowest percentage of enrollees of any demonstration MCO who enrolled primarily because of lower costs and better benefits (26 percent) and the highest percentage who enrolled primarily because of the MCO's providers (42 percent). Thus, in the heavily penetrated San Diego market, UCSD attracted enrollees from other MCOs primarily because of the quality and reputation of its medical-school-affiliated providers rather than by offering a better benefit package than other MCOs.

Two MCOs stand out in the proportion of enrollees that joined because of information received from a salesperson. Sixteen percent of beneficiaries joined Crozer-Keystone primarily for that reason, and almost 23 percent of beneficiaries in Health Partners joined primarily for that reason. This compares to 2 percent to 8 percent for the other MCOs. Both Crozer-Keystone and Health Partners stated during site visits that they found that in-home visits by a sales representatives were very effective for attracting new enrollees.

Out-of-network coverage was an important influence on enrollment in Independence Blue Cross only, where 9 percent of its members enrolled primarily for that reason.⁵ A much smaller percentage of enrollees in other MCOs offering POS products cited this as a reason for enrolling, which is not surprising, since most of those MCOs had a very limited self-referral benefit.

4. Disenrollment Rates

In examining disenrollment from the demonstration, we focused on *voluntary* disenrollments, since our goal was to examine the extent of disenrollment that may have resulted from dissatisfaction

⁵And 14 percent of IBC's enrollees listed the out-of-network coverage as at least one of their reasons for joining.

with or a misunderstanding of MCO rules. Beneficiaries who were disenrolled because of death, and those who were forced to disenroll when their MCOs withdrew from the demonstration were not included in our definition of disenrollment. For the five MCOs that withdrew from the demonstration, we estimated voluntary disenrollment rates by using lifetable methods to control for the length of time the enrollees could be observed before involuntary disenrollments began to occur.⁶ We computed disenrollment rates relative to the time elapsed since the enrollment date—for example, the 12-month disenrollment rate is the percentage of enrollees who disenrolled within 12 months after enrolling.

Thirteen percent of demonstration enrollees disenrolled within 12 months after joining their MCO (see Table IV.5). Of those who disenrolled, 40 percent did so within the first 3 months following enrollment. Disenrollment within three months is typically thought to be an indicator of a poor understanding of the MCO at the time of enrollment. Disenrollment rates varied substantially, ranging from 5 percent at Mount Carmel and Yellowstone to 28 percent at St. Joseph's. On average, the 12-month disenrollment rate in MCOs with a POS product was almost twice as high as in MCOs with no out-of-network coverage (17 percent versus 9 percent). The higher disenrollment rate among enrollees in a POS product may be a result of not understanding, at the time of enrollment, the limitations on the POS benefit.

We suspect that the high disenrollment rate experienced by St. Joseph's reflects both the poor design of the MCO's product and the beneficiaries' lack of understanding about the product. St. Joseph's did not have a contracted physician network but allowed enrollees to visit any physician in

⁶We specified the censoring point in the lifetable analysis as the month in which the MCOs announced to their enrollees that they were withdrawing. This ensured that beneficiaries who disenrolled in response to that information were not included in our definition of voluntary disenrollees.

TABLE IV.5

**DISENROLLMENT RATES AND SUBSEQUENT ENROLLMENT
BEHAVIOR OF DISENROLLEES**

	Percent who disenrolled, by length of time from enrollment			Coverage after disenrollment		
	3 months	6 months	12 months	Immediately enrolled in another MCO	Enrolled in another MCO within 3 months	Did not enroll in another MCO in 3 months
All MCOs	5.2	7.7	13.2	37.5	5.2	57.3
PPO/EPO Products	8.2	12.9	21.0	32.4	4.4	63.2
Independence Blue Cross	6.2	8.8	14.0	41.9	9.6	48.5
St. Joseph's	10.2	17.0	28.0	27.5	1.7	70.9
POS Products	7.0	10.6	17.4	40.6	3.9	55.5
Crozer-Keystone	6.5	9.8	14.3	40.6	5.1	54.3
Memorial Sisters of Charity	6.1	9.4	20.9	28.8	3.3	68.0
People's Health Network	9.2	13.2	20.0	54.2	4.8	40.9
SCHP	6.3	9.8	14.5	38.8	2.3	59.0
No Out-of-Network Coverage	3.7	5.6	9.3	39.5	5.4	55.1
Florida Hospital Healthcare System	3.9	5.5	9.5	52.8	5.6	41.6
Health Alliance	2.3	3.8	6.2	17.4	5.7	77.0
Health Partners	7.1	11.7	19.3	35.2	4.8	60.1
Mount Carmel	2.0	3.0	4.9	30.0	8.1	61.9
Ohio Health Alliance	6.4	7.3	9.0	36.9	9.0	54.1
UCSD Health Plan	2.3	4.7	11.0	67.5	3.6	29.0
Yellowstone Community Health Plan	2.0	3.3	5.0	11.8	2.9	85.3

NOTE: The 3-month disenrollment rate is the percentage of enrollees who disenrolled within three months of joining the MCO. The 6-month and 12-month rates are defined analogously.

the service area who accepted assignment under Medicare. However, only physicians with admitting privileges at participating hospitals could admit enrollees. Approximately 500 physicians in the service area informed St. Joseph's that they would not accept patients under the demonstration. Thus, many enrollees may have disenrolled when they learned that their physician did not have admitting privileges at a participating hospital or was not participating in the demonstration.

Because of differences in methodology, the 12-month disenrollment rates we computed for the demonstration are not directly comparable with those reported in other recent studies (Riley et al. 1997; GAO 1998; Nelson et al. 2000). Using the same methods as used here, Brown et al. (1993) found that 12-month disenrollment rates in Medicare risk MCOs in the late 1980's ranged from 3 percent to 59 percent, with a median of 11 percent. More recent estimates of 3-month disenrollment rates computed by GAO (1998), using the same methods as used here, indicate that the 3-month disenrollment rates among the demonstration MCOs are similar to those experienced by Medicare risk MCOs generally. GAO found that in 1996, 34 percent of risk MCOs had a 3-month disenrollment rate of less than 3 percent, and 56 percent had a 3-month rate of between 3 and 9 percent. Among the 13 demonstration MCOs, 31 percent had a 3-month rate of less than 3 percent, and 69 percent had a 3-month rate of between 3 and 9 percent.

Forty-three percent of disenrollees joined another Medicare MCO within three months of disenrolling (see right panel of Table IV.5). In contrast, nearly two-thirds of all beneficiaries who disenrolled from risk HMOs in 1996 switched to another HMO (Nelson et al. 1996). The much smaller percentage of demonstration disenrollees who switched to another MCO is not surprising, since the Medicare managed care penetration in some of the demonstration markets was lower than average (including two with no other Medicare managed care option), and some MCOs designed their product to appeal to beneficiaries who had resisted enrolling in Medicare HMOs.

TABLE IV.6

DISENROLLMENT RATES, BY BENEFICIARY SUBGROUP
(Percent Disenrolling Within 12 Months)

MCO	Race		Age			Sex		Medicaid	
	White	Other	<65	65-84	>84	Male	Female	Yes	No
All MCOs	11.6	20.5	14.6	12.7	17.0	12.2	14.0	25.3	12.3
PPO/EPO Products	19.7	34.2	22.9	20.6	22.8	19.3	22.4	43.9	20.7
Independence Blue Cross	12.6	26.0	17.0	13.1	20.7	13.1	14.7	41.1	13.8
St. Joseph's	26.8	42.3	28.8	28.1	24.8	25.4	30.0	46.6	27.5
POS Products	15.6	21.8	17.6	17.1	21.6	16.4	18.2	29.3	16.3
Crozer-Keystone	13.9	15.1	13.4	14.0	19.0	12.8	15.3	20.6	13.0
People's Health Network	18.4	29.6	20.3	20.6	27.3	18.9	22.4	36.2	19.4
Memorial Sisters of Charity	15.8	27.7	20.1	19.6	25.2	20.3	19.9	38.7	18.6
SCHP	14.2	14.9	16.5	14.1	14.7	13.6	15.1	21.9	14.0
No Out-of-Network Coverage	9.0	10.7	11.0	8.9	13.0	8.6	9.7	19.8	8.8
Florida Hospital Healthcare System	9.2	11.3	12.2	8.9	11.7	8.8	10.0	21.5	9.1
Health Alliance	5.8	13.2	6.8	5.9	9.4	6.4	5.9	14.8	6.0
Health Partners	18.4	19.6	16.2	20.0	26.9	17.2	20.7	19.7	18.7
Mount Carmel	4.6	9.1	5.1	4.7	7.5	4.3	5.3	14.5	4.6
Ohio Health Alliance	8.8	12.5	13.5	8.1	11.0	8.0	9.7	28.0	8.5
UCSD	11.5	5.3	18.2	9.8	18.4	10.2	11.6	30.8	9.9
Yellowstone	5.0	3.8	5.2	4.8	5.9	5.3	4.7	9.2	4.9

Disenrollment rates were highest among nonwhites, the under 65 disabled, the oldest old, and those on Medicaid (see Table IV.6). This suggests that these vulnerable subgroups were less satisfied with their care and/or had a poorer understanding of how to use their MCO. Disenrollment rates by beneficiary subgroup varied across MCOs, but there were few consistent patterns. Yellowstone, Mount Carmel, and Health Alliance--none of which offered out-of-network coverage--had the lowest disenrollment rates among the under 65 disabled and the oldest old.

Five MCOs withdrew from the demonstration, resulting in involuntary disenrollments. In two of the five MCOs, most enrollees returned to FFS Medicare (see Table IV.7).⁷ The percent who returned to FFS Medicare varied, as expected, with the availability of other Medicare managed care options in the market (there were none in Yellowstone's service area) and with the preferences of enrollees. Most enrollees in St. Joseph's returned to FFS Medicare despite the availability of other managed care options. Their decisions suggest that beneficiaries who were attracted to this

TABLE IV.7

DISENROLLMENT DECISIONS OF BENEFICIARIES AFFECTED BY MCO WITHDRAWAL

MCO	Percent Disenrolling to FFS	Percent Disenrolling to other MCO
Crozer-Keystone	40.4	59.6
Florida Hospital Healthcare System	18.4	81.6
Ohio Health Alliance	42.6	57.4
St. Joseph's	80.9	19.1
Yellowstone	100.0	0.0

⁷The estimates in Table IV.7 were constructed for beneficiaries who were enrolled in the five withdrawing MCOs in their final month of operation.

MCO because it did not have a gatekeeper requirement were resistant to enrolling in a traditional HMO.⁸ Florida Hospital Healthcare System had the highest percentage of involuntary disenrollees who immediately enrolled in another Medicare MCO (82 percent).

5. Reasons for Disenrollment

Twenty-eight percent of beneficiaries who voluntarily disenrolled from a demonstration MCO did so primarily for reasons related to costs or benefits (see Table IV.8). Within that group, seven percent disenrolled because they reached the limits of their prescription drug coverage. The next most common reasons for disenrolling were problems with providers (cited by 21 percent), the beneficiary's decision to move out of the MCO's service area (12 percent), various service-related problems (12 percent), and access problems (9 percent). Only 2 percent of beneficiaries said they disenrolled specifically because they had not understood the MCO at the time of enrollment. However, poor understanding of the MCO may have contributed to other reasons cited for disenrolling.⁹

Those switching to another MCO differed from those disenrolling into FFS Medicare in several ways.¹⁰ Switchers were more likely than disenrollees to FFS to disenroll because their doctor left their plan, died, or retired (8 percent versus 1 percent). Those disenrolling into FFS were more likely to do so because they did not like the choice of the MCO's doctors or specialists. The sample size of disenrollees is quite small. Other differences were not found to be statistically significant.

⁸Enrollees in St. Joseph's may also have been disillusioned about managed care after being enrolled in an MCO with a poor product design.

⁹The question on reasons for disenrollment was open-ended. Thus, for example, some beneficiaries who said they disenrolled because the MCO was too expensive may not have fully understood the benefit package when they enrolled.

¹⁰Switchers were defined for this analysis as beneficiaries that joined another MCO within three months after disenrollment.

TABLE IV.8
REASONS FOR DISENROLLMENT

Percent Citing Most Important Reason As:	All Disenrollees	Disenrolled into FFS	Switchers
Cost/Benefits	28.1	23.9	34.9
Too expensive	10.4	8.2	13.3
Another plan costs less	1.9	1.7	2.3
Another plan offered better benefits	8.7	8.4	9.8
Reached limits of Rx coverage	7.2	5.6	9.6
Problems Related to Providers	21.0	22.1	20.5
Doctor is not competent	2.5	2.0	3.1
Doctor left plan, died, or retired	5.3	1.2	8.4
Could not see the same doctor at each visit	2.2	2.8	1.7
Did not like choice of primary care doctors	8.3	11.0	6.5
Did not like choice of specialists	2.1	4.3	0.0
Did not like choice of hospitals	0.7	0.6	0.8
Doctor did not speak same language as enrollee	0.1	0.2	0.0
Access	9.1	11.9	6.8
Could not get referrals to specialist	1.9	3.1	0.7
Did not like referrals requirement	2.0	3.5	0.6
Could not get appointments when needed	1.5	1.7	1.5
Could not get admitted to hospital when needed	0.6	0.4	0.7
Could not get home health care	0.2	0.5	0.0
Location inconvenient	2.8	2.7	3.3
Service Related Problems	11.6	12.7	10.4
Problems with paying for services or billing	6.0	7.0	4.3
Card not accepted	3.0	2.2	4.2
Poor customer service	1.3	1.8	0.8
Not treated as an individual, treated like masses	0.7	0.4	1.1
Paperwork too complex	0.6	1.2	0.0
Reasons Related to Beneficiaries' Understanding	2.2	2.7	1.9
Misunderstood sales people/Did not like sales approach	1.6	1.9	1.5
Did not understand plan	0.6	0.9	0.4
Reasons Unrelated to the MCO			
Moved out of plan service area	12.3	10.3	13.0
Other			
Joined another plan	14.8	15.6	11.9
Unsatisfied with plan	2.3	0.6	3.9
Someone else suggested they drop plan	1.6	1.6	1.7
Had other insurance/Did not need plan	1.0	0.3	1.7
Poor plan reputation	0.9	1.3	0.5
Other	0.4	0.8	0.0

* Indicates that the difference between disenrollees into FFS and switchers is statistically significant at the .05 level, two-tailed test.

**Indicates that the difference between disenrollees into FFS and switchers is statistically significant at the .01 level, two-tailed test

D. BIASED SELECTION'

We assessed the nature and extent of biased selection in the demonstration through four measures: (1) prior expenditures of enrollees compared with those of nonenrollees, (2) prevalence of conditions predictive of high future costs, (3) mortality rates, and (4) self-reported measures of health status. Each of these measures has strengths and limitations, so by examining all of them, we obtained the best overall picture of biased selection in the demonstration. In addition to comparing enrollees with nonenrollees on each of the four measures, we also examined whether the demonstration MCOs experienced biased disenrollment by comparing those who disenrolled from the demonstration with continuing enrollees on selected measures of biased selection. Investigating biased disenrollment is important because if enrollees with serious or chronic health conditions were more likely than others to disenroll, it may be that such beneficiaries were more likely to face access problems or to have been dissatisfied with the care provided.

1. Overview of the Measures

a. Prior Expenditures for Enrollees and Nonenrollees

Prior expenditures are a common measure of biased selection because they are highly correlated with future expenditures. However, if enrollee expenditures would have regressed to the mean for all Medicare beneficiaries, comparisons based on prior expenditures will overstate the degree of favorable selection. As an additional measure, we used the Hierarchical Coexisting Conditions (HCC) model developed by Ellis et al. (1996) to identify beneficiaries with conditions that are predictive of high future costs.¹¹

¹¹Using software obtained from DxCG, Inc., we used diagnoses on inpatient and outpatient claims from the baseline period to compute the HCC cost factor for each individual, which is the ratio of the expected expenditure for that person to the mean expenditure for the Medicare population.

b. Prevalence of High-Cost Conditions

On the basis of HCC cost factors, we identified two groups of beneficiaries with high-cost conditions. The first group had HCC cost factors greater than 2, and the second had cost factors greater than 4. A cost factor of 2 means that the beneficiary is predicted to have twice the average level of expenditure, and a factor of 4 means that expenditures are predicted to be four times higher than normal.¹² Two limitations of this approach are that enrollee-non enrollee differences in this measure may partly reflect differences in access to care, and there may be systematic differences between enrollees and nonenrollees in the severity of illness within diagnostic categories defined by the HCC model.

c. Mortality Rates

Mortality rates of enrollees versus nonenrollees are the third measure of biased selection in this study. While only about five percent of the Medicare population dies each year, they account for a relatively large proportion of Medicare expenditures. Thus, significant differences between enrollees and nonenrollees in mortality rates suggests that the two groups may differ significantly in their expected costs of care. However, the measure is limited because it provides no information on the health care needs of beneficiaries who did not die during the followup period. In addition, differences in mortality rates could to some extent reflect differences between the MCOs and FFS providers in the quality of care provided.

d. Self-Reported Measures of Health Status

Our fourth approach to measuring biased selection is to compare enrollees and nonenrollees on a range of health status measures derived from the beneficiary survey, including the SF-12 physical

¹²Approximately 11 percent of nonenrollees had HCC cost factors greater than 2, and a little more than 1.5 percent had cost factors above 4.

and mental component summaries (PCS and MCS), presence of chronic or serious health conditions, and functional limitations. These data provide a rich set of measures on beneficiaries' health status. However, as with any survey-based estimates, the self-reported measures may not correspond closely with clinical measures of health status for all beneficiaries.

In the comparisons of prior expenditures, we used the rate cell method described in Chapter II to adjust for differences between enrollees and nonenrollees in the characteristics included in the M+C payment method -- reason for entitlement (age or disability), age, sex, Medicaid status, institutional status, and county of residence. For the other measures, we used logit models to control for differences between enrollees and nonenrollees in all of the demographic adjusters except institutional status, which was not available for nonenrollees.

2. Comparison of Enrollees and Nonenrollees

a. Prior Medicare Expenditures

Comparisons of baseline Medicare expenditures for enrollees and nonenrollees indicate that the demonstration MCOs experienced favorable selection, albeit to a lesser extent than has been reported for Medicare risk HMOs. Baseline expenditures for enrollees were 16 percent lower than for nonenrollees (see Table IV.9). After we adjusted for differences between the two groups in demographic risk factors, enrollees' baseline expenditures were 7 percent lower than nonenrollees' baseline expenditures. Using the same methods, Hill and Brown (1990) found that prior expenditures for Medicare risk enrollees were 23 percent lower than the AAPCC-adjusted expenditures for nonenrollees. In a more recent study, Call et al. (1999) found that baseline expenditures for risk enrollees were 35 percent lower than unadjusted expenditures for nonenrollees.

The direction and magnitude of biased selection varied significantly across MCOs. Based on the adjusted estimates, all of the MCOs offering POS products had neutral selection, while four of

TABLE IV.9

COMPARISON OF BASELINE EXPENDITURES FOR ENROLLEES AND NONENROLLEES

MCO	Enrollee Expenditure (Dollars)	Nonenrollee Expenditure (Dollars)	Enrollee/ Nonenrollee Expenditure	Adjusted Nonenrollee Expenditure (Dollars)	Enrollee/ Adjusted Nonenrollee Expenditure
All MCOs	3,711	4,414	0.84***	3,981	0.93***
PPO/EPO Product	3,925	4,867	0.81***	4,225	0.93
Independence Blue Cross	4,167	5,328	0.78***	4,540	0.92**
St. Joseph's	3,683	4,405	0.84***	3,911	0.94
POS Product	4,553	4,884	0.93	4,514	1.01
Crozer-Keystone	5,322	5,130	1.04	5,054	1.05
Memorial Sisters of Charity	4,551	4,911	0.93*	4,493	1.01
People's Health Network	4,630	5,488	0.84***	4,873	0.95
SCHP	3,711	4,007	0.93	3,636	1.02
No Out-of-Network Coverage	3,575	4,056	0.88	3,796	0.94
Florida Hospital Healthcare System	3,698	4,999	0.74***	4,424	0.84***
Health Alliance Medical Plans	2,134	2,958	0.72***	2,492	0.86***
Health Partners	5,509	5,865	0.94	6,380	0.86*
Mount Carmel Health Plan	2,805	3,629	0.77***	3,232	0.87***
Ohio Health Alliance	3,050	3,344	0.91**	2,996	1.02
UCSD Health Plan	5,148	4,731	1.09	4,455	1.16
Yellowstone Community Health Plan	2,678	2,868	0.93	2,593	1.03

NOTE: The adjusted mean expenditure for nonenrollees adjusts for differences between enrollees and nonenrollees across AAPCC rate cells.

*The difference between enrollees and nonenrollees is significant at the .10 level, two-tailed test.

**The difference between enrollees and nonenrollees is significant at the .05 level, two-tailed test.

***The difference between enrollees and nonenrollees is significant at the .01 level, two-tailed test.

the seven MCOs with no out-of-network coverage had favorable selection.¹³ The findings related to POS products are consistent with the hypothesis that MCOs offering such products are more likely to attract sicker enrollees than are MCOs with no out-of-network coverage, since the self-referral option is likely to appeal most to those with above-average needs for health care who wish to preserve their freedom to seek care outside the network. However, it is noteworthy that three of the MCOs with no out-of-network coverage experienced neutral selection.

We also found that selection effects in non-POS products varied substantially and in ways likely to reflect the design of the products. Independence Blue Cross experienced favorable selection in its PPO product. While the reasons for this outcome are not clear, it may be related to two factors: (1) sponsorship (Independence was the only demonstration MCO not sponsored by a provider system), and (2) benefit design (Independence's prescription drug benefit was not as generous as that of the four POS products).

MCOs that used physician support or endorsement as part of their marketing strategy all experienced neutral selection: Crozer-Keystone, Ohio Health Alliance, Peoples Health Network, and Yellowstone. Thus, there is no evidence that the physicians in these MCOs selectively marketed the MCO to their healthiest patients. In fact, the use of physicians to market these MCOs may have contributed to their experiencing less favorable selection than MCOs that did not use physicians in this role.

Health Alliance and Yellowstone were the only Medicare managed care options in their market when they entered the demonstration. Both served small cities and rural areas, but each attracted a

¹³We regard an MCO as having neutral selection if the mean baseline expenditure for enrollees was not significantly different from the adjusted mean for nonenrollees at the 0.10 significance level. For completeness, we included UCSD in the tables in this chapter. However, there were only 136 enrollees and 274 nonenrollees in the UCSD claims sample, so we were not likely to detect enrollee-non enrollee differences in baseline expenditures for this MCO and were likely to detect only moderate to large differences in measures expressed as percentages.

very different mix of enrollees. Health Alliance experienced favorable selection, which is consistent with the evidence that favorable selection in Medicare risk HMOs has been greatest in markets with low penetration rates (Call et al. 1999). In contrast, Yellowstone experienced neutral selection. We do not know what accounts for the difference. It may reflect differences between the residents in the two markets in terms of their perception of the sponsoring provider systems or in terms of their general attitude toward managed care. The favorable selection experienced by Health Alliance may also partially reflect the fact that, unlike Yellowstone, it did not offer a prescription drug benefit.

Four of the five MCOs that withdrew from the demonstration because of financial difficulties experienced neutral selection, and one (Florida Hospital Healthcare System) experienced favorable selection.¹⁴ In Chapter VI, we discuss why demonstration MCOs may have incurred large financial losses under the demonstration even though they experienced neutral or favorable selection.

b. Prevalence of High-Cost Conditions

The findings for enrollees and nonenrollees related to the prevalence of high-cost conditions are similar to the findings on baseline expenditures for enrollees and nonenrollees. After controlling for differences between enrollees and nonenrollees in age, sex, and Medicaid status, we found that enrollees were nine percent less likely than nonenrollees to have medical conditions predictive of costs more than twice the national average (see Table IV.10). Enrollees were 25 percent less likely than nonenrollees to have costs more than four times the national average. Thus, the more costly a person's medical conditions, the less likely that he/she would enroll in a demonstration MCO.

The variation across MCOs in this measure of biased selection was similar, though not identical, to what we found in the analysis of baseline expenditures. The findings confirm that Independence

¹⁴The four that withdrew because of financial difficulties and that experienced neutral selection are Crozer-Keystone, St. Joseph's, Yellowstone, and Ohio Health Alliance

TABLE IV.10

COMPARISON OF ENROLLEES AND NONENROLLEES ON THE PERCENT
WITH HIGH HCC RISK FACTORS

MCO	HCC risk factors > 2				HCC risk factors > 4			
	Enrollees	Non-Enrollees	Enrollee/ Nonenrollee	Adjusted Ratio	Enrollees	Nonenrollees	Enrollee/ Nonenrollee	Adjusted Ratio
All MCOs	9.0	11.1	0.81***	0.91***	1.0	1.6	0.65***	0.75***
PPO/EPO Product	9.8	12.9	0.76***	0.88***	1.0	2.0	0.50***	0.58***
Independence Blue Cross	11.5	14.7	0.78***	0.88***	1.1	2.4	0.48***	0.56***
St. Joseph's	8.1	11.0	0.73***	0.87	0.9	1.6	0.53**	0.63*
POS Product	10.9	10.7	1.02	1.07*	1.4	1.5	0.91	0.96
Crozer-Keystone	16.1	13.9	1.15**	1.12*	2.4	2.2	1.09	1.02
Memorial Sisters of Charity	9.3	9.6	0.97	1.04	1.4	1.3	1.03	1.11
People's Health Network	9.5	9.4	1.01	1.13	1.1	1.4	0.79	0.93
SCHP	8.6	9.7	0.88	0.99	0.8	1.3	0.60*	0.69
No Out-of-Network Coverage	8.5	10.9	0.78***	0.88**	0.8	1.6	0.47***	0.54***
Florida Hospital Healthcare System	9.2	13.2	0.70***	0.83***	1.1	2.0	0.54***	0.71***
Health Alliance Medical Plans	4.0	7.7	0.52***	0.61***	0.3	0.7	0.43**	0.56
Health Partners	15.1	16.1	0.94	0.97	1.7	2.5	0.68*	0.65**
Mount Carmel Health Plan	6.7	9.6	0.70***	0.83***	0.7	1.5	0.51***	0.63***
Ohio Health Alliance	7.6	9.0	0.84	1.00	1.0	1.2	0.79	1.01
UCSD Health Plan	11.0	13.9	0.80	1.12	0.0	2.9	0.00**	0.00
Yellowstone Community Health Plan	6.0	6.8	0.88***	0.99	0.5	0.6	0.84	0.90

NOTE: The adjusted ratio was computed from logit models that control for differences between enrollees and nonenrollees on age, sex, and Medicaid status.

*The difference between enrollees and nonenrollees is significant at the .10 level, two-tailed test.

**The difference between enrollees and nonenrollees is significant at the .05 level, two-tailed test.

***The difference between enrollees and nonenrollees is significant at the .01 level two-tailed test.

Blue Cross and some of MCOs with no out-of-network coverage experienced favorable selection, while the MCOs with POS products were more likely to experience neutral selection.

c. Mortality Rates

The comparison of mortality rates for enrollees and nonenrollees also suggests that the demonstration MCOs experienced favorable selection. After controlling for differences in age, sex, and Medicaid status, we found that the mortality rate for enrollees in the one-year follow-up period was 28 percent lower than for nonenrollees (see Table IV.11). This is comparable to evidence in Riley, Lubitz, and Rabey (1991), who found that new enrollees in Medicare risk plans had a 31 percent lower mortality rate than nonenrollees, after controlling for differences between the two groups on AAPCC characteristics.

Compared with the findings for biased selection as measured by prior expenditures and high-cost conditions, a larger number of MCOs experienced favorable selection when selection was measured by mortality rates. As noted, however, mortality rates capture only one aspect of biased selection. As with the other measures examined, MCOs with POS products experienced less favorable selection with respect to mortality rates than did the other MCOs.

d. Self-Reported Health Status

The measures of self-reported health status obtained from the survey indicate that the greatest differences between enrollees and nonenrollees are in the prevalence of functional limitations. After controlling for differences in age, sex, Medicaid status, and market area, we found that enrollees were three to four percentage points less likely than nonenrollees to be limited in the activities of daily living (ADLs), and that they were three to five percentage points less likely to be limited in the instrumental activities of daily living (IADLs) (see Table IV.12). The adjusted estimates indicate

TABLE IV.11

COMPARISON OF ENROLLEE AND NONENROLLEE MORTALITY RATES

MCO	3 Month mortality			12 Month mortality			Adjusted Ratio of 12 Month Mortality Rates
	Enrollees	Nonenrollees	Enrollee/ Nonenrollee Ratio	Enrollees	Nonenrollees	Enrollee/ Nonenrollee Ratio	
All MCOs	0.9	1.5	0.56***	3.7	6.0	0.62***	0.72***
PPO/EPO Products	0.7	1.3	0.58***	3.1	5.6	0.55***	0.68***
Independence Blue Cross	0.8	1.6	0.51***	3.2	6.3	0.51***	0.61***
St. Joseph's	0.7	1.0	0.65	2.9	4.9	0.60***	0.76*
POS Products	1.1	1.5	0.75***	4.7	5.9	0.80***	0.86***
Crozer-Keystone	1.4	1.6	0.87	5.6	6.4	0.89	0.92
Memorial Sisters of Charity	1.0	1.5	0.65***	3.9	5.8	0.68***	0.77***
People's Health Network	1.3	1.4	0.95	5.3	6.2	0.85	0.92
SCHP	0.8	1.5	0.53**	3.9	5.1	0.77**	0.85
No Out-of-Network Coverage	0.8	1.6	0.51***	3.8	6.1	0.61***	0.71***
Florida Hospital Healthcare System	0.8	1.7	0.47***	3.4	6.0	0.56***	0.67***
Health Alliance Medical Plans	0.6	1.3	0.46***	2.7	5.3	0.50***	0.66***
Health Partners	1.0	1.9	0.50***	3.6	6.7	0.53***	0.69***
Mount Carmel Health Plan	0.8	1.6	0.47***	3.8	6.2	0.61***	0.76***
Ohio Health Alliance	0.8	1.6	0.47***	3.9	6.1	0.64***	0.79***
UCSD Health Plan	0.7	1.8	0.40	5.1	6.9	0.74	0.82
Yellowstone Community Health Plan	1.0	1.3	0.80	3.9	5.7	0.68***	0.78*

NOTE: The adjusted ratio was computed from logit models that control for differences between enrollees and nonenrollees on age, sex, and Medicaid status.

*The difference between enrollees and nonenrollees is significant at the .10 level, two-tailed test.

**The difference between enrollees and nonenrollees is significant at the .05 level, two-tailed test.

***The difference between enrollees and nonenrollees is significant at the .01 level two-tailed test.

TABLE IV.12

COMPARISON OF THE HEALTH STATUS OF
ENROLLEES AND NONENROLLEES
(Percentages)

Health Indicator	Enrollee Mean	Nonenrollee Mean	Difference	P-value	Adjusted Difference	P-value
Self-Reported Health Status						
Percent Excellent	12.7	12.1	0.5	0.57	0.2	0.85
Percent Poor	7.4	9.7	-2.3	0.01	-1.9	0.02
SF-12 Summary Measures						
Physical Health	42.7	41.6	1.1	0.00	0.6	0.12
Mental Health	53.0	52.5	0.5	0.11	0.1	0.63
Medical Conditions (Percent with the following):						
Heart attack	14.2	13.8	0.4	0.71	0.6	0.55
Heart attack in past year	2.2	2.1	0.0	0.92	0.1	0.80
Congestive heart failure	8.5	8.3	0.2	0.80	0.5	0.56
Diabetes	18.5	15.5	3.0	0.01	3.2	0.00
Angina	11.6	12.1	-0.5	0.63	-0.3	0.73
Cancer	14.2	15.5	-1.3	0.23	-1.3	0.22
Stroke	10.2	11.6	-1.4	0.13	-1.4	0.14
Chronic lung disease	13.4	13.7	-0.3	0.78	0.20	0.84
Functional Impairments						
ADLs						
Percent with difficulty:						
Bathing	12.9	17.4	-4.5	0.00	-3.9	0.00
Dressing	9.8	15.2	-5.4	0.00	-4.8	0.00
Getting in/out of bed or chairs	14.6	19.6	-5.0	0.00	-4.4	0.00
Using toilet	7.0	12.0	-5.0	0.00	-4.7	0.00
Mean number of ADL limitations (0-4)	0.44	0.64	-0.20	0.00	-0.14	0.00
IADLs						
Percent with difficulty:						
Preparing meals	10.9	15.3	-4.4	0.00	-3.2	0.00
Shopping	14.9	19.7	-4.8	0.00	-3.8	0.00
Managing money	8.3	14.3	-6.0	0.00	-5.1	0.00
Mean number of IADL limitations (0-3)	0.32	0.46	-0.13	0.00	-0.09	0.00

NOTE: The adjusted difference was computed from logit models that control for differences between enrollees and nonenrollees on age, sex, Medicaid, status, and market area.

that two groups did not differ with respect to the SF-12 summary measures of physical and mental health, the prevalence of most serious medical conditions, or the percentage who reported that they were in excellent health. However, enrollees were less likely to report that they were in poor health.

The results of MCO-level comparisons of the prevalence of functional limitations are similar to those for prior expenditures and high-cost conditions. In three of the five MCOs with no out-of-network coverage that were included in the survey, and in Independence Blue Cross, the adjusted estimates indicate that enrollees were less likely than nonenrollees to have ADL or IADL impairments (see Table IV.13). Fewer differences were observed for the SF-12 measures. However, as noted in Chapter II, we can detect only moderate to large differences for individual MCOs with the survey sample because it is much smaller than the claims sample.

e. Summary

All measures of biased selection indicate that, as a whole, the demonstration MCOs experienced favorable selection. However, the nature of the selection varied significantly across MCOs. Those that offered POS products and those that used physicians to market their products were least likely to experience favorable selection, and on many measures they experienced neutral selection.

3. Analysis of Biased Disenrollment

Enrollees with high baseline expenditures and those with conditions predictive of high future costs were more likely than those with lower baseline expenditures and lower-cost conditions to disenroll from the demonstration MCOs. Overall, 17 percent of enrollees whose baseline expenditures were in the top quartile in their market disenrolled within 12 months after enrolling, compared with 10 percent of those whose baseline expenditures were in the bottom quartile (see Table IV.14). Enrollees differ in a similar way when they are classified into quartiles based on their HCC risk factor.

TABLE IV.13

COMPARISON OF THE HEALTH STATUS OF
ENROLLEES AND NONENROLLEES BY MCO

MCO	SF-12 PCS		SF12 MCS		Number of ADL Impairments		Number of IADL Impairments	
	Nonenrollee Mean	Adjusted Enrollee- Nonenrollee Difference	Nonenrollee Mean	Adjusted Enrollee- Nonenrollee Difference	Nonenrollee Mean	Adjusted Enrollee- Nonenrollee Difference	Nonenrollee Mean	Adjusted Enrollee- Nonenrollee Difference
Total	41.7	0.6	52.7	0.1	0.63	-0.14 ***	0.45	-0.09 ***
PPO Product								
Independence Blue Cross	42.5	2.6 ***	52.4	1.1	0.52	-0.16 **	0.40	-0.11 *
POS Product								
Crozer-Keystone	42.0	0.2	51.6	-1.4	0.68	-0.11	0.44	0.00
Memorial Sisters of Charity	42.2	-1.6 *	54.7	-1.2 *	0.56	-0.02	0.38	0.02
People's Health Network	40.8	-0.1	51.7	0.0	0.79	-0.14	0.36	-0.02
SCHIP	41.3	0.1	51.8	0.3	0.60	-0.02	0.49	-0.06
No Out-of-Network Coverage								
Health Alliance	42.5	1.1	55.9	2.4 ***	0.53	-0.17 **	0.35	-0.12 **
Health Partners	39.5	1.4	48.8	0.6	0.94	-0.39 ***	0.70	-0.30 ***
Mount Carmel	41.8	0.7	52.7	0.6	0.65	-0.21 ***	0.47	-0.15 ***
UCSD	42.2	0.2***	54.6	-2.1	0.63	-0.09	0.44	-0.09
Yellowstone Community Health	41.2	0.6	54.1	0.8	0.53	-0.04	0.36	-0.05

NOTE: The adjusted difference was computed from logit models that control for differences between enrollees and nonenrollees on age, sex, Medicaid, status, and market area.

*Significant at the .10 level

**Significant at the .05 level

***Significant at the .01 level

TABLE IV.14

**DISENROLLMENT BY BASELINE RISK:
PERCENT DISENROLLING WITHIN 12 MONTHS**

MCO	HCC Risk Quartile				Baseline Expenditure Quartile			
	Disenrolled		Disenrolled to FFS		Disenrolled		Disenrolled to FFS	
	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
All MCOs	10.2	16.9	6.3	12.1	9.9	17.2	6.3	12.4
PPO/EPO Product	20.8	22.5	13.3	16.6	20.1	23.7	12.6	17.4
Independence Blue Cross	11.9	16.5	5.5	10.2	13.5	17.5	6.6	11.4
St. Joseph's	29.7	28.6	21.1	23.0	26.6	30.0	18.6	23.4
POS Product	14.8	22.3	8.3	16.1	14.1	23.0	8.5	16.7
Crozer-Keystone	12.7	20.0	7.2	16.1	11.0	19.8	6.9	15.2
Memorial Sisters of Charity	17.2	28.2	12.4	22.7	17.1	27.1	12.4	22.1
People's Health Network	17.0	22.4	6.7	13.8	15.3	25.1	6.4	16.1
	12.4	18.6	6.8	11.7	12.8	19.9	8.4	13.3
No Out-of-Network Coverage	7.2	12.3	4.2	8.4	7.0	13.6	3.6	9.2
Florida Hospital Healthcare System	6.1	12.3	3.7	9.0	6.1	12.7	3.5	9.1
Health Alliance Medical Plans	5.4	9.1	4.2	7.2	5.5	7.0	4.3	5.6
Health Partners	11.6	23.3	8.0	17.0	11.0	24.9	6.7	18.4
Mount Carmel Health Plan	3.7	8.0	2.7	5.5	4.0	7.5	2.7	5.4
Ohio Health Alliance	8.1	11.4	4.1	5.8	8.1	10.6	4.5	5.4
UCSD Health Plan	11.1	16.3	3.7	9.8	9.5	27.1	0.0	16.3
Yellowstone Community Health Plan	4.6	5.4	3.2	4.6	4.5	5.3	3.5	4.3

We also analyzed biased disenrollment by comparing baseline expenditures of disenrollees with baseline expenditures of continuing enrollees.¹⁵ To ensure that only voluntary disenrollments were included in the analysis, we excluded beneficiaries enrolled in an MCO that subsequently withdrew from the market if these individuals enrolled less than a year before the MCO made its intention to withdraw known.

Baseline expenditures of continuing enrollees were 45 percent lower than baseline expenditures of disenrollees (see Table IV.15). When we adjusted for differences between the two groups in the demographic characteristics included in the M+C payment mechanism, the ratio of baseline expenditures of those who remained enrolled to the expenditures of disenrollees was approximately the same, changing from .55 to .61. In all MCOs, the baseline expenditures of those who stayed with the plan for at least a year were lower than the expenditures of those who disenrolled.

Baseline expenditures were substantially higher among beneficiaries who disenrolled to FFS Medicare than among those who switched immediately to another MCO. For the demonstration as a whole, baseline expenditures of those who disenrolled to FFS were approximately twice as high as expenditures of those who remained and more than 30 percent higher than expenditures of switchers (see Table IV.16). Thus, among beneficiaries who disenrolled, beneficiaries with the greatest needs for care returned to FFS Medicare.

E. EFFECTS ON MEDICARE COSTS

In this section, we place the previous analysis in context by looking at what biased selection means for Medicare. We compared capitated payments made to MCOs for coverage of their enrollees in 1998 with the payments the enrollees would have incurred for Medicare had they been

¹⁵Continuing enrollees are beneficiaries who remained in their MCO until the end of the follow-up period (or until their death, if they died before the end of the follow-up period).

TABLE IV.15

**BASELINE EXPENDITURES BY DISENROLLEES
AND CONTINUING ENROLLEES**

MCO	Mean Expenditure		Ratio of Continuing Enrollees to Disenrollees	
	Continuing Enrollees	Disenrollees	Unadjusted	Adjusted
All MCOs	3,356	6,107	0.55 ***	0.61***
PPO/EPO Product	3,756	5,935	0.63 ***	0.64***
Independence Blue Cross	3,732	6,474	0.58 ***	0.59***
St. Joseph's	3,823	5,114	0.75 *	0.67**
POS Product	4,041	6,281	0.64 ***	0.68***
Crozer-Keystone	4,953	6,754	0.73 **	0.76**
Memorial Sisters of Charity	3,920	6,518	0.60 ***	0.65***
People's Health Network	4,154	6,181	0.67 ***	0.73***
SCHP	3,261	5,626	0.58 ***	0.60***
No Out-of-Network Coverage	3,219	6,686	0.48 ***	0.53***
Florida Hospital Healthcare System	3,283	6,813	0.48 ***	0.50***
Health Alliance Medical Plans	2,035	3,194	0.64 ***	0.71**
Health Partners	4,842	7,953	0.61 ***	0.61***
Mount Carmel Health Plan	2,613	4,804	0.54 ***	0.57***
Ohio Health Alliance	2,723	4,418	0.62 **	0.75
UCSD Health Plan	4,264	9,274	0.46 **	0.46*
Yellowstone Community Health Plan	2,681	3,456	0.78	0.75

NOTE: The adjusted ratio adjusts for differences between disenrollees and continuing enrollees across AAPCC rate cells.

*The difference between continuing enrollees and disenrollees is significant at the .10 level, two-tailed test.

**The difference between continuing enrollees and disenrollees is significant at the .05 level, two-tailed test.

***The difference between continuing enrollees and disenrollees is significant at the .01 level, two-tailed test.

TABLE IV.16

BASELINE EXPENDITURES BY CONTINUING ENROLLEES, DISENROLLEES TO FFS, AND SWITCHERS

MCO	Mean Expenditure			Uadjusted Ratios		Adjusted Ratios	
	Continuing Enrollees	Disenrollees to FFS	Switchers	Continuing Enrollees/ Disenrolled to FFS	Continuing Enrollees/ Switchers	Continuing Enrollees/ Disenrolled to FFS	Continuing Enrollees/ Switchers
All MCOs	3,356	6,427	4,899	0.52***	0.69***	0.58***	0.76***
PPO/EPO Product	3,756	6,069	5,557	0.62***	0.68*	0.63***	0.67*
Independence Blue Cross	3,732	6,668	5,995	0.56***	0.62***	0.58***	0.63***
St. Joseph's	3,823	5,236	4,678	0.73*	0.82	0.63**	0.81
POS Product	4,041	6,966	4,156	0.58***	0.97	0.62***	0.98
Crozer-Keystone	4,953	7,566	3,166	0.65***	1.56	0.68***	1.52
Memorial Sisters of Charity	3,920	6,828	4,914	0.57***	0.80	0.62***	0.90
People's Health Network	4,154	7,547	3,588	0.55***	1.16	0.61***	1.16
SCHP	3,261	5,832	5,104	0.56***	0.64**	0.58***	0.66*
No Out-of-Network Coverage	3,219	6,982	5,444	0.46***	0.59**	0.50***	0.72
Florida Hospital Healthcare System	3,283	6,925	6,264	0.47***	0.52***	0.49***	0.52***
Health Alliance Medical Plans	2,035	3,131	3,742	0.65***	0.54	0.74*	0.55
Health Partners	4,842	8,815	5,205	0.55***	0.93	0.55***	0.90
Mount Carmel Health Plan	2,613	4,890	4,303	0.53***	0.61**	0.56***	0.64*
Ohio Health Alliance	2,723	4,140	5,310	0.66*	0.51*	0.80	0.63
UCSD Health Plan	4,264	10,094	6,812	0.42**	0.63	0.42**	0.67
Yellowstone Community Health Plan	2,681	3,702	726	0.72	3.69	0.71	2.04

NOTE: The adjusted mean expenditure for disenrollees adjusts for differences between disenrollees and continuing enrollees across AAPCC rate cells.

*The difference between the groups being compared is significant at the .10 level, two-tailed test.

**The difference between the groups being compared is significant at the .05 level, two-tailed test.

***The difference between the groups being compared is significant at the .01 level, two-tailed test.

covered under FFS. The difference in these values is the cost or savings to Medicare that resulted from managed care. We computed capitated payments for the enrollee sample using the demographic cost factors and county payment rates published on HCFA's web site. We predicted FFS expenditures for enrollees in 1998 using a regression model estimated on the nonenrollee sample. The independent variables in the model included the HCC cost factor (which is a function of the beneficiary's age, sex, and baseline diagnoses), baseline expenditures, and a dummy variable indicating whether the person was covered by Medicaid. We used the estimated coefficients from the model and characteristics of the enrollee sample to predict enrollees' FFS payments for 1998.

We excluded St Joseph's and UCSD from this analysis because they did not start enrolling beneficiaries until the second half of 1998, which was the follow-up period for the analysis. Thus, most enrollees in the sample for these two MCOs had only one or two months of enrollment experience during the follow-up period. We were concerned that because of seasonal variations in health care use, focusing the analysis on such beneficiaries could have distorted our results.¹⁶ In addition, the size of the claims-based sample for UCSD was very small (136 enrollees and 274 nonenrollees).

Overall, the demonstration did not have a significant effect on Medicare program costs (see Table IV.17). The annualized mean capitation payment for enrollees (\$5,739) did not differ significantly from the mean FFS expenditure predicted for enrollees (\$5,751). This finding is consistent with the comparison of baseline expenditures for enrollees and nonenrollees reported above, in which we found that the demonstration MCOs experienced much less favorable selection as a group than has been reported for Medicare HMOs. The estimated effects on Medicare costs by

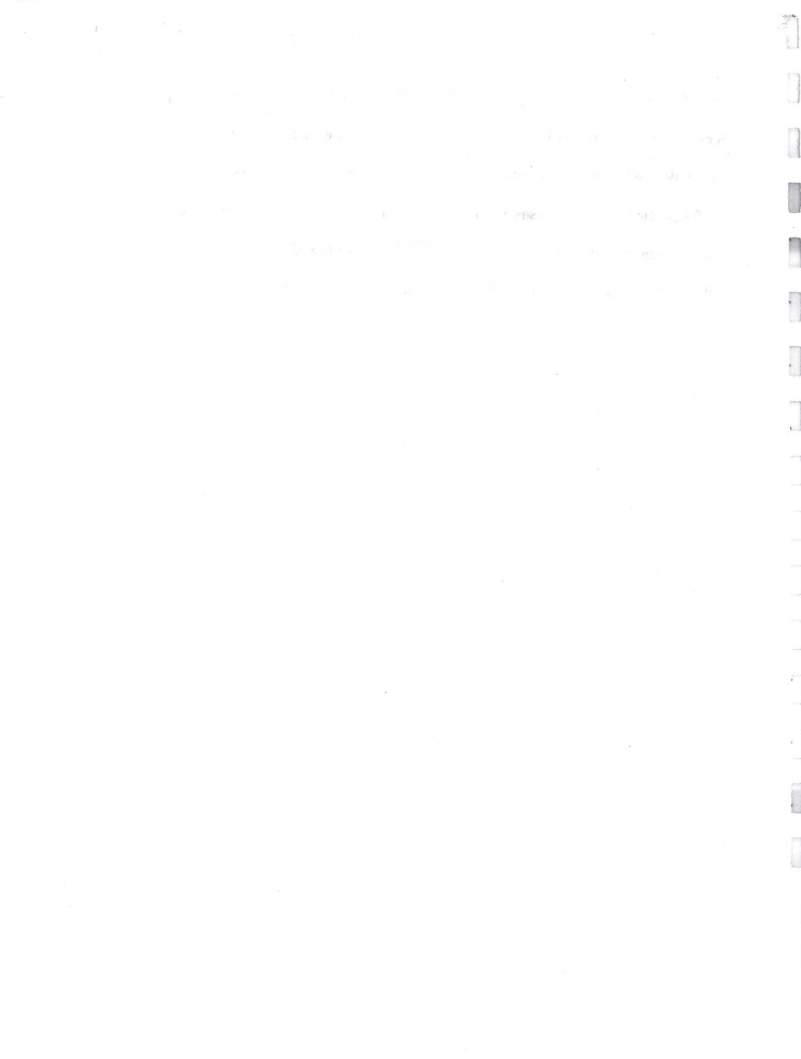
¹⁶The predicted FFS expenditures for enrollees were based on the actual expenditures for nonenrollees in the portion of the follow-up period after their pseudo-enrollment date (see Chapter II). Thus, predicted FFS expenditures for enrollees in St. Joseph's and UCSD would have been based on nonenrollees' actual expenditures in the last few months of 1998.

TABLE IV. 17
EFFECTS ON MEDICARE PROGRAM COSTS

MCO	Enrollee Capitation Payments	Nonenrollee Expenditures	Predicted Enrollee FFS Expenditures	Enrollee Capitation Payments/ Nonenrollee Expenditures	Enrollee Capitation Payments/ Predicted Enrollee FFS Expenditures
All MCOs	5,739	6,191	5,751	0.93	1.00
PPO/EPO Product	6,728	7,800	7,100	0.86	0.95
Independence Blue Cross	6,728	7,800	7,100	0.86	0.95
POS Product	6,554	7,107	6,993	0.92	0.94***
Crozer-Keystone	7,181	7,572	7,528	0.95	0.95
Memorial Sisters of Charity	6,092	7,134	6,972	0.85	0.87***
People's Health Network	6,820	8,046	7,219	0.85	0.94
SCHP	6,038	5,677	5,274	1.06	1.14**
No Out-of-Network Coverage	5,423	5,481	5,117	0.99	1.06***
Florida Hospital Healthcare System	5,578	5,927	5,205	0.94	1.07**
Health Alliance Medical Plans	4,044	4,243	3,743	0.95	1.08*
Health Partners	9,164	8,795	9,383	1.04	0.98
Mount Carmel Health Plan	4,881	5,016	4,519	0.97	1.08**
Ohio Health Alliance	4,770	4,830	4,654	0.99	1.02
Yellowstone Community Health Plan	4,054	4,075	4,016	0.99	1.01

NOTE: We excluded St. Joseph's and UCSD from this analysis for the reasons described in the text.

type of product are generally consistent with the patterns of biased selection reported previously. For example, our estimates indicate that, on average, the Medicare program paid six percent more for enrollees in MCOs with no out-of-network coverage than it would have paid for those enrollees in FFS Medicare (\$5,423 versus \$5,117) and six percent less for enrollees in MCOs with POS products than it would have paid for them in FFS Medicare (\$6,554 versus \$6,993). However, within each of those product types, effects on Medicare costs varied across MCOs



V. EFFECTS ON ACCESS AND SATISFACTION WITH CARE

In this chapter, we examine the effects of the demonstration on access to care and satisfaction with care. Access and satisfaction are related concepts that, together, provide a broad picture of the quality, extent, and outcomes of care from the beneficiary's perspective. It is widely recognized that managed care has the potential to improve or reduce quality of care. On the one hand, the financial incentives created by risk-based payment may encourage plans to restrict access to services in some cases, thereby reducing the quality of care. Quality may also drop if the same financial incentives encourage plans to contract with lower quality providers. On the other hand, risk-based payment creates incentives for plans to improve the coordination of care and emphasize preventive care, thereby raising the quality care. In addition, the minimal copayments in managed care plans reduce financial barriers to access, particularly for beneficiaries who cannot afford supplemental insurance.

The MCOs in the Medicare Choices Demonstration differ from most Medicare risk plans in ways that could improve or detract from the quality of care. On the one hand, many of the provider-sponsored MCOs viewed the demonstration as an opportunity to give providers more control over care management than is possible when they contract with HMOs. If the philosophy of such provider-sponsored MCOs places less emphasis on constraining service use than is the case for typical HMOs, access could improve. On the other hand, since the provider-sponsored MCOs are "younger" on average than most HMOs and less experienced in providing care on a risk basis, their ability to coordinate care may be less effective, and their systems for encouraging the use of preventive care, less developed. In addition, the two demonstration MCOs that did not require enrollees to select a PCP gatekeeper were limited in their ability to improve the coordination of care, though the open access feature could contribute to beneficiary satisfaction.

Among the positive effects of the demonstration, enrollees were more likely than nonenrollees to rate their overall quality of care as excellent. The demonstration also appears to have increased the likelihood that a beneficiary would have an established relationship with a personal physician or nurse. For most other measures of access, enrollees and nonenrollees were similar, or where differences were found, they were modest. For example, compared with nonenrollees, enrollees were more likely to obtain timely access to routine care and to wait for less time in the physician's office. However, a slightly higher proportion of enrollees relative to nonenrollees were not able to see a specialist when needed, and reported that they suffered a negative consequence as a result. At the MCO level, we found that in the two demonstration MCOs that were the first Medicare MCOs in their area (Yellowstone in Billings Montana and Health Alliance in Illinois), enrollees were much more satisfied with care than were nonenrollees. And for Yellowstone, they also had better access to care along a number of dimensions than did nonenrollees. This result implies that introducing an organized system of health care into rural areas and small cities for Medicare beneficiaries can contribute to better access to and satisfaction with care.

Studies have shown that Medicare beneficiaries in the FFS sector often find it difficult to understand the Medicare program (Hibbard and Jewett 1998, Hash 1998). We also found that enrollees in the demonstration often had a poor understanding of their coverage. This was particularly true for those enrolled in MCOs with out-of-network coverage. Over one-third of enrollees in such MCOs did not understand that they had access to out-of-network providers, but that they would pay a higher copayment for out-of-network care. Also, the lack of understanding about coverage was more prevalent among disenrollees and may have contributed to their decision to disenroll. Since an understanding of health care coverage figures prominently into obtaining care,

our results suggest that beneficiary education will continue to be an important issue for HCFA and for MCOs participating in the Medicare program.

A. PREVIOUS RESEARCH

Research shows that the great majority of Medicare HMO enrollees and FFS beneficiaries are satisfied with their care. Using data from the 1994 Medicare Current Beneficiary Survey, Tudor, Rily, and Inbger (1998) found that HMO enrollees were more satisfied than their FFS counterparts with the cost of their care and with the ability to get care at one location. The two groups did not differ in their assessment of the overall quality of care, but HMO enrollees were less satisfied than FFS beneficiaries with the quality of their interactions with physicians. Brown et al. (1993) found that Medicare HMO enrollees were more satisfied than their FFS counterparts with their out-of-pocket costs but less satisfied with the overall quality of care and various aspects of care, including personal attention and access.

Brown et al. also found that HMO enrollees received less extensive care than did FFS beneficiaries for specific ambulatory conditions. For example, HMO enrollees were less likely to see specialists or to have follow-up care recommended. However, despite the fact that such service use was lower in HMOs, the outcomes of care were very similar for the two groups. These results suggest that the lower intensity of service use by HMO enrollees may reflect reductions in unnecessary or inappropriate care.

The evidence suggests that, compared with beneficiaries in FFS, beneficiaries in HMOs have poorer access to home health care. Shaughnessy, Schlenker, and Hittle (1994) found that Medicare HMO enrollees receiving home health care receive many fewer services and have significantly worse outcomes than their counterparts in the FFS sector. Brown et al. (1993) also found that home health patients in HMOs received only about half as many home visits as their counterparts in the FFS

sector. More recently, a national survey of Medicare HMO enrollees found that 17 percent of those who had received home health care thought they needed more care than they had received (Nelson et al. 1996). However, less than 0.5 percent reported that they had been denied an admission to a home health care. The survey also found that the great majority of HMO enrollees were satisfied with their access to specialists and inpatient care.

A review of the literature on preventive services from 1990 to 1998 found no conclusive evidence that managed care plans provided more preventive care than indemnity plans, either for the general population or the Medicare population (Phillips et al. 2000). Almost all studies found that enrollees in group/staff model HMOs obtained more preventive services than those in indemnity plans. But other types of managed care plans were not found to provide more preventive care than indemnity plans.

B. RESEARCH QUESTIONS AND OUTCOME MEASURES

The objectives of this component of the evaluation were to estimate the effects of the demonstration on access to care and satisfaction with care, and to investigate related topics, such as enrollees' understanding of their MCOs and their use of out-of-network services. The main questions addressed in the analysis include:

- What are the overall effects of the demonstration on enrollees' access to care and on their satisfaction with care?
- How do the effects of the demonstration on access and satisfaction vary across MCOs?
- How do the effects of the demonstration MCOs on access and satisfaction vary across selected beneficiary subgroups, such as those classified by age, race, and health status?
- How well do enrollees understand their MCOs and the rules for obtaining care? For example, how well do enrollees in PPO, POS, and triple option products understand their benefits for out-of-network coverage?

- What percentage of enrollees obtain care out of network, why do they obtain such care, and how much do they spend on it?

To address these questions, we constructed a variety of measures of access and satisfaction from the beneficiary survey data. Many of these measures were based on survey questions derived from the Medicare CAHPS survey, which will facilitate future comparison of our findings with estimates HCFA is obtaining for M+C MCOs. We derived other measures from additional questions we incorporated into the survey to assess (1) perceived barriers to specialty care, inpatient care, and home health care; (2) enrollees' willingness to recommend their MCO to friends and relatives; (3) enrollees' understanding of their MCO; and (4) enrollees' use of out-of-network services.

The questions on perceived barriers to access were derived from an MPR survey of Medicare managed care enrollees conducted for the Physician Payment Review Commission (Nelson et al. 1996). These questions asked whether beneficiaries did not obtain particular services they thought they needed, such as a visit to a specialist. However, beneficiary perceptions, while important, are subjective and may not necessarily reflect the best medical judgment about the services they need. To at least partially address the issue of the reliability of beneficiary perceptions, we asked beneficiaries who said they were not able to receive services they needed what consequences, if any, resulted from their failure to receive those services. We used these data to construct two measures of each perceived barrier to access: (1) the percentage of beneficiaries who did not receive a service they thought they needed and (2) the percentage of beneficiaries who did not receive a service they thought they needed and who also reported having suffered a negative consequence as a result.¹

¹We defined negative consequences broadly to include adverse health consequences, financial consequences (such as the need to pay for care out-of-pocket), hospital or SNF admissions, and emergency room visits. For perceived barriers to home health care, negative consequences also included a need to obtain more informal care from family or friends.

The reference period for most access and satisfaction measures was the six months before the interview.² For disenrollees, the reference period was the six months before they disenrolled or, for those who were enrolled for fewer than six months, their entire tenure in the MCO. Many measures were constructed for only a portion of the sample because the relevant question was not asked of all sample members. For example, the questions on satisfaction with care were asked only of beneficiaries who had received medical care during the reference period, and questions on access to certain types of services (such as special medical equipment) were asked only of beneficiaries who needed such services.

C. RELATIONSHIP WITH A PERSONAL PHYSICIAN OR NURSE

Having a regular physician is generally viewed as important in achieving access to care. For example, if a person has a regular physician, he or she does not have to go through the somewhat burdensome process of identifying a physician when the need for care arises. Primary care physicians in particular can promote access by improving the coordination of care across providers as well as by enhancing the continuity of health care.

Enrollees were more likely than nonenrollees to have a personal physician or nurse (95 percent versus 88 percent) (see Table V.1).³ This may stem partly from the fact that patients of physicians affiliated with the provider-sponsored MCOs were presumably more likely than other area beneficiaries to enroll in the demonstration, particularly if the MCO used their physicians to market their plan. However, enrollees were 5 percentage points more likely to have a personal physician

²A one-year reference period was specified for measures of perceived barriers to inpatient and home health care and for the receipt of two types of preventive care (physical exams and mammograms).

³The survey question, taken from CAHPS, asked beneficiaries whether they had a person that they considered to be their personal physician or nurse. To simplify the discussion, we refer to this as a personal physician.

TABLE V.1

COMPARISON OF ENROLLEES AND NONENROLLEES ON THEIR
RELATIONSHIP WITH A PERSONAL PHYSICIAN OR NURSE

	Percentage Who Have a Personal Physician or Nurse				Percentage Who Had a Personal Physician or Nurse before Enrolling	Percentage Who Kept the Same Personal Physician or Nurse after Enrolling
	Enrollees	Non-Enrollees	Unadjusted Difference	P-Value		
All MCOs	94.9	87.6	7.4	0.00	90.0	63.4
PPO Product						
Independence Blue Cross	95.2	90.9	4.3	0.04	93.5	79.9
POS Product						
People's Health Network	92.0	81.5	10.5	0.00	86.6	60.8
Crozer-Keystone	95.6	88.5	7.2	0.01	92.8	69.5
Memorial Sisters of Charity	94.9	86.1	8.8	0.00	87.9	52.5
SCHP	89.9	82.9	7.0	0.02	83.0	41.9
No Out-of-Network Coverage						
Health Alliance	97.1	87.5	9.6	0.00	92.1	61.4
Health Partners	90.4	87.2	3.2	0.29	81.1	55.8
Mount Carmel	97.5	88.6	8.8	0.00	94.5	70.0
UCSD	91.2	88.6	2.6	0.33	82.8	28.6
Yellowstone	96.9	86.0	10.9	0.00	86.9	63.1

after enrolling than before they enrolled, which suggests that enrolling in the demonstration increased the likelihood of having a personal physician. This is not surprising, since all but one of the MCOs included in the survey required enrollees to have a PCP as a gatekeeper.

Sixty-three percent of enrollees kept the same personal physician after joining a demonstration MCO that they had before joining the demonstration.⁴ This percentage is much higher than reported for Medicare risk enrollees. For example, in a national survey of Medicare risk enrollees in 1996, 42 percent of new enrollees reported keeping the same primary care physician after enrolling (Nelson et al. 1996). The high percentage of demonstration enrollees who kept the same personal physician reflects the fact that some of the provider-sponsored MCOs used their physicians to market their plans and that Independence Blue Cross's PPO product has a relatively large physician network. Independence had the highest percentage of enrollees who kept the same personal physician after enrolling (80 percent). The fact that many beneficiaries enrolled in the demonstration MCOs without changing physicians is an attractive feature of these organizations from the perspective of beneficiaries, since the ability to retain a relationship with a primary care physician is an important consideration for many individuals, particularly the elderly and disabled.

For the small proportion of beneficiaries who did not have a personal physician, the primary reason given by enrollees and nonenrollees was that they rarely or never got sick (see Table V.2). Almost half of the nonenrollees and 29 percent of enrollees gave this as their primary reason for not having a personal physician. Ten percent of enrollees did not have a personal physician before joining a demonstration MCO. When asked why, they most often said that that they rarely or never

⁴The percentage of enrollees who kept the same personal physician was computed over the entire sample of enrollees (including those who did not have a personal physician before enrolling).

TABLE V.2
REASONS FOR NOT HAVING A PERSONAL PHYSICIAN OR NURSE
(Percentages)

Main Reason	Main Reason for Not Having a Personal Physician or Nurse Now ^a		Main Reason for Enrollees Not Having a Personal Physician before Joining a Demonstration MCO ^b
	Enrollees	Nonenrollees	
Rarely or never get sick	29.3	49.0	48.2
Don't like to go to doctors	3.2	5.1	3.2
Previous doctor died, retired, or moved	10.0	7.6	8.0
Don't like current doctor	6.5	3.9	1.1
Regular health care too expensive	0.0	1.4	10.6
Recently joined MCO, haven't selected a doctor	17.1	n.a.	n.a.
Recently moved into area	7.7	7.6	6.9
Don't feel need for a personal doctor	2.9	7.1	1.2
Use clinic/hospital/emergency room when sick	1.9	6.1	8.0
See only specialists or different doctors	9.8	3.5	6.0
Doctor not in plan	3.0	2.0	0.2
Other	8.7	6.6	6.6

^aThis question was asked only of beneficiaries who reported they did not have a personal physician or nurse; 177 enrollees and 97 nonenrollees responded to this question.

^bThis question was asked only of enrollees who did not have a physician prior to joining a demonstration MCO; 323 enrollees responded to this question.

n.a.: Not applicable.

got sick. Interestingly, the second most important reason cited was that regular health care was too expensive (11 percent). This was a much higher proportion that was the case for nonenrollees, perhaps indicating that the lower cost-sharing requirements associated with MCOs (compared with Medicare FFS) helped to increase access to physicians for some beneficiaries.

D. EFFECTS ON ACCESS TO CARE

1. Overall Effects

Overall, demonstration enrollees and nonenrollees had comparable access to care, after controlling for differences between the two groups in beneficiary characteristics. The demonstration had no effect on some access measures, improved access on some measures, and reduced access on other measures. On most measures for which access was increased or reduced, the effects were modest.

a. Medical Tests and Treatment

Enrollment in the demonstration had no effect on whether beneficiaries received the medical tests and treatment they thought they needed (see Table V.3). Over 80 percent of enrollees and nonenrollees were always able to get the tests and treatment they needed, while only 4 to 5 percent of both groups were sometimes or never able to get the tests or treatment they thought they needed.⁵

b. Reported Barriers to Specialty, Inpatient, and Home Health Care

After we controlled for differences in beneficiary characteristics, enrollees were more likely than nonenrollees to report problems with access to specialty care and home health care but were less likely to report problems with access to inpatient hospital care. However, the great majority of

⁵Less than one percent of enrollees and nonenrollees said that they were never able to get the tests or treatment they needed.

TABLE V.3
ESTIMATED EFFECTS ON ACCESS TO CARE
(Percentages)

Access Measures	Enrollees	Nonenrollees	Difference	P-Value
Medical Tests and Treatment				
Obtained tests and treatment needed				
Always	82.5	80.5	2.0	0.16
Sometimes or never	4.9	4.4	0.5	0.50
Reported Barriers to Specialty, Inpatient, and Home Health Care				
Not able to see a specialist when the need for one was perceived				
Any case	7.3	4.8	2.5	0.01
Cases reporting negative consequences	5.7	3.7	2.0	0.02
Not admitted to a hospital when the need for hospital care was perceived				
Any case	1.1	2.3	-1.2	0.00
Cases reporting negative consequences	0.8	1.8	-1.0	0.04
Discharged from a hospital before ready (among those with a hospital stay)				
Any case	5.4	4.1	1.3	0.25
Cases reporting negative consequences	4.4	3.7	0.6	0.60
Needed home health care but did not receive any				
Any case	2.6	1.4	1.2	0.02
Cases reporting negative consequences	2.2	0.7	1.4	0.00
Needed more health care than received (among those with any use)				
Any case	15.5	13.2	2.3	0.47
Cases reporting negative consequence	9.4	10.6	-1.2	0.62
Appointments for Routine and Urgent Care				
Able to get an appointment for regular or routine care as soon as wanted				
Always	76.4	70.4	6.0	0.00
Sometimes or never	6.8	6.5	0.3	0.75

TABLE V.3 (continued)

Access Measures	Enrollees	Nonenrollees	Difference	P-Value
Appointments for Routine and Urgent Care (cont'd)				
Able to be seen for an illness or injury as soon as wanted				
Always	71.7	70.9	0.8	0.71
Sometimes or never	12.2	8.4	3.8	0.01
Wait in doctor's office more than 30 minutes past appointment time				
Never	58.7	42.7	16.0	0.00
Always or usually	13.8	17.1	-3.2	0.01
Access to Selected Types of Care				
Able to get prescription medicine				
Always	89.2	88.7	0.5	0.64
Sometimes or never	5.5	4.8	0.7	0.36
Did not get a prescription filled because unable to pay	8.7	8.2	0.4	0.62
Able to get medical help/advice in the evenings or on weekends				
Always	50.0	53.0	-3.0	0.51
Sometimes or never	36.3	27.8	8.5	0.05
Ease of getting medical help/advice in the evenings or on weekends				
Very easy	28.7	22.5	6.2	0.12
Hard or very hard	21.6	17.4	4.2	0.27
Obtained special medical equipment without investing a lot of time/energy	64.7	76.6	-12.0	0.00
Maximum sample size ^a	2,846	2,013		

NOTE: Demonstration effects were estimated from logit models that control for differences between enrollees and nonenrollees. The estimated models were used to generate predicted probabilities for each individual as an enrollee and as a nonenrollee. The difference between the mean of these two predictions is the estimated effect of the demonstration.

^aNumbers reflect the maximum sample size available for analysis. The sample size was smaller for some measures because some access questions were asked of only a subset of the sample. Item nonresponse also reduced the sample size for some measures.

enrollees and nonenrollees were satisfied with their access to these services, except for the fact that some users of home health care (both enrollees and nonenrollees) felt they needed more care than they had received

Enrollment in the demonstration increased the likelihood that a beneficiary was not able to see a specialist when desired and thus reported suffering negative consequences by two percentage points (from four to six percent). This effect was caused largely by two MCOs that offer POS products, which we discuss further below.

Across all MCOs, the reason most commonly cited by beneficiaries for not seeing a specialist when they considered such a visit necessary was that they did not have a referral from their PCP. This reason was given by 56 percent of enrollees and 27 percent of nonenrollees, a two-fold difference. That the lack of a referral was the most common reason cited by nonenrollees, whose PCPs had no financial or other incentives to avoid referring their patients to a specialist, presumably reflects disagreement between beneficiaries and their PCPs about the medical necessity of a referral. Among enrollees, the next most common reasons for not seeing a specialist when they wanted to were the inability to get an appointment or a timely appointment (cited by 17 percent) and the inability to afford the cost of the visit (9 percent). Among nonenrollees, the next most common reasons for not seeing a specialist were not knowing where to go or how to find a specialist (20 percent), inability to afford the cost (15 percent), and lack of transportation (12 percent).

After we controlled for differences in beneficiary characteristics, demonstration enrollees were less likely than FFS beneficiaries to report that they had not been admitted to a hospital when they thought they should have been and then suffered negative consequences (0.8 percent versus 1.8 percent). Among beneficiaries who were hospitalized, there was no significant difference between enrollees and nonenrollees in the percentage who reported that they had been discharged before they

felt they were ready. Although the estimated effect is small, the finding that enrollees were less likely than nonenrollees to believe they had been denied a necessary hospital admission is noteworthy, since the capitated payments gave MCOs an incentive to eliminate discretionary admissions. Practice patterns in the demonstration markets have undoubtedly been influenced by the growth of managed care, but our site visit findings suggest that providers that were attracted to the demonstration may be more “mission driven” and possibly more resistant than other providers in their markets to reducing hospitalizations in response to financial incentives. However, if this is true, the greater resistance to financial incentives did not extend to home health care, since enrollees were 1.4 percentage points more likely than nonenrollees to report that they had been denied home health care they felt they needed and had then suffered negative consequences.

c. Appointments for Routine and Urgent Care

Enrollees were more likely than nonenrollees to report that they could always get an appointment for regular or routine care as soon as they wanted and that they waited for less time in physician offices. These findings may at least partly result from the fact that enrollees were more likely than nonenrollees to have an established relationship with a personal physician, since many physicians give preference to their regular patients when scheduling appointments.

Enrollees and nonenrollees were equally likely to report that they had always been seen for all illness or injury as soon as they wanted. However, enrollees were 3.8 percentage points more likely than nonenrollees to report that they were sometimes or never able to be seen for an illness or injury as soon as they wanted. This may reflect the frustration of some enrollees when the timing of care did not meet their expectations, which could have been caused by actual delays in scheduling or, in some MCOs, by delays associated with getting a referral to a specialist. However, it would not appear to reflect a deliberate effort by the MCOs to limit access to specialists through tight control

of the number of specialists in their networks, since we found that specialists constitute a relatively high percentage of network physicians in all of the MCOs (see Chapter III).

d. Access to Selected Services

After we controlled for differences in beneficiary characteristics, enrollees did not differ from nonenrollees in their ability to obtain the prescription medicine they needed or in the likelihood that they had not filled a prescription because of an inability to pay. Nearly 90 percent of enrollees and nonenrollees were always able to get the prescription medicine they needed, although 8 to 9 percent reported that on at least one occasion, they had not gotten a prescription filled because of an inability to pay. For enrollees, these findings reflect the fact that all but one of the demonstration MCOs offered prescription drug coverage but that it was limited in many cases. For example, four MCOs capped their drug benefit at less than \$1,000 annually. The options for obtaining prescription drug coverage in the FFS sector include Medigap plans, employer-sponsored supplemental plans, Medicaid, and in some states, state-administered prescription drug programs. However, only 3 of the 10 standardized Medigap plans include a prescription drug benefit. These plans are relatively expensive and offer limited drug benefits (Davis et al. 1999).⁶ Furthermore, access to Medigap plans can be limited.⁷ Thus, restricted access to prescription drugs in the FFS sector results from a variety of factors, including limitations in the coverage provided by Medigap plans and by some employer-

⁶All three standardized Medigap plans that offer prescription drug coverage have a \$250 deductible and a 50 percent coinsurance rate. Two plans have a maximum annual benefit of \$1,250, and one has a maximum annual benefit of \$3,000.

⁷Elderly beneficiaries are guaranteed the ability to purchase Medigap insurance during a six-month open enrollment period when they first enroll in Medicare. However, beneficiaries seeking to purchase Medigap insurance after the open enrollment period can be denied coverage or subjected to pre-existing condition exclusions. There is no open enrollment period for disabled beneficiaries, who cannot purchase Medigap insurance in many states (Davis et al. 1999).

sponsored plans, restricted access to Medigap insurance, and the inability of some beneficiaries to afford Medigap insurance.

Enrollees who tried to obtain medical help or advice in the evenings or on weekends were more likely than nonenrollees to report that such services were sometimes or never forthcoming. The reason for this difference is not clear, but our findings suggest that some of the MCOs may need to strengthen their regulations ensuring that all network providers make arrangements for after-hours care. Enrollment in the demonstration decreased the likelihood by 12 percentage points (from 77 to 65 percent) that beneficiaries who needed special medical equipment, such as wheelchairs and oxygen, could obtain such equipment "without taking a lot of time and energy." This suggests that, compared with FFS Medicare, the demonstration MCOs' prior authorization requirements made it more burdensome for enrollees to obtain such equipment.⁸

2. MCO-Level Effects

Yellowstone Community Health Plan, which introduced Medicare managed care to Billings, Montana and the surrounding rural areas, had the largest positive effects on access to care of all the demonstration MCOs (see Table V.4).⁹ Enrollment in Yellowstone significantly increased the probability that beneficiaries were always able to get (1) the tests and treatment they thought they needed, (2) an appointment for regular or routine care as soon as they wanted, and (3) the

⁸This survey question, derived from Medicare CAHPS, allowed us to assess the burden on enrollees of obtaining special medical equipment but not to investigate whether enrollees actually obtained the medical equipment they thought they needed.

⁹We present a subset of access measures in Table V.4 that are of greatest policy interest and had the largest sample sizes. We excluded measures in which sample sizes were too small to be confident of detecting even large differences between enrollees and nonenrollees at the MCO level. The excluded measures are those for which data were collected on a relatively small subset of the sample (such as those who needed special medical equipment) and those for which the reference period was one year.

TABLE V.4

ESTIMATED EFFECTS ON ACCESS TO CARE, BY MCO

	Always Able to:													
	Get Tests and Treatments Needed		Get an Appointment for Regular or Routine Care as Soon as Wanted				Get Prescription Medicine		Not Able to See a Specialist Despite Perceived Need (negative consequences)		Did Not Get Prescription Filled Because of Inability to Pay		Never Waited More Than 30 Minutes in Doctor's Office	
	Non- enrollee Mean	Estimated Effect	Non- enrollee Mean	Estimated Effect	Non- enrollee Mean	Estimated Effect	Non- enrollee Mean	Estimated Effect	Non- enrollee Mean	Estimated Effect	Non- enrollee Mean	Estimated Effect	Non- enrollee Mean	Estimated Effect
All MCOs	80.5	2.0	70.4	6.0***	70.9	0.8	88.7	0.5	3.7	2.0**	8.2	0.4	41.9	14.1***
PPO Product														
Independence Blue Cross	82.0	4.3	75.6	2.1	76.9	3.3	91.7	-2.5	0.7	2.4	4.5	4.8**	45.0	8.3*
POS Product														
People's Health Network	80.1	6.7*	66.9	7.0	67.0	-1.5	88.5	2.3	1.7	6.7**	10.7	0.6	37.3	17.6***
Crozer-Keystone	81.5	-1.1	67.4	8.5	69.4	-0.1	85.0	0.4	2.5	1.5	10.0	-2.4	37.6	19.1***
Memorial Sisters of Charity	78.1	1.4	76.2	2.4	68.2	-0.9	88.9	2.2	4.8	1.6	6.8	0.0	31.7	18.6***
SCHP	80.1	1.3	62.3	16.2***	64.2	6.7	84.5	2.8	4.9	8.6**	12.0	-2.2	40.8	11.5**
No Out-of-Network Coverage														
Health Alliance	78.2	2.8	74.1	-2.6	75.6	0.9	87.5	2.9	2.7	3.8	9.0	0.3	47.6	28.9***
Health Partners	81.3	-8.5	68.6	3.9	70.7	-16.5*	83.9	-1.6	8.4	0.5	17.3	-8.1**	36.1	3.3
Mount Carmel	83.0	1.7	65.9	15.0***	71.2	4.6	90.7	0.0	4.7	0.1	8.7	1.2	49.6	8.6**
UCSD	76.3	1.0	62.4	-13.7**	69.6	-8.0	87.7	-3.3	9.6	0.3	7.4	2.2	48.6	14.8***
Yellowstone	78.1	9.5***	66.5	16.8***	66.5	9.1	87.1	5.8**	1.8	-1.2	7.5	-1.9	44.3	26.4***

NOTE: Demonstration effects were estimated from logit models that control for differences between enrollees and nonenrollees. The estimated models were used to generate predicted probabilities for each individual as an enrollee and as a nonenrollee. The difference between the mean of these two predictions is the estimated effect of the demonstration.

*Significant at the .10 level, two-tailed test.

**Significant at the .05 level, two-tailed test.

***Significant at the .01 level, two-tailed test.

prescription medicine they needed. This finding suggests that bringing Medicare beneficiaries in small cities and rural communities into an organized system of care has the potential to significantly improve access.

Health Partners was only somewhat successful in improving access in low-income, inner city neighborhoods of Philadelphia. On the one hand, its benefit package significantly improved beneficiaries' financial access to prescription drugs; enrollees were 8 percentage points less likely than similar nonenrollees to report that they had not gotten a prescription filled because of an inability to pay. However, Health Partners' delivery system did not significantly improve access to other types of care and in fact reduced the likelihood that beneficiaries could always be seen for an illness or injury as soon as they wanted.

Enrollment in two of the nine MCOs, Peoples Health Network and SCHP, increased the likelihood that beneficiaries were not able to see a specialist when they thought they needed to and then reported negative consequences. This finding is intriguing because these two MCOs offered POS benefits. (For the remaining MCOs, the results were not statistically significant.) Peoples Health Network offered a triple option product that involved minimal cost sharing for services authorized by the enrollees' PCP, higher cost sharing for self-referred care within the network, and still higher cost sharing (equivalent to that in FFS Medicare) for self-referred care outside the network. SCHP offered a very limited POS product with an "authorized out-of-network services" benefit.¹⁰

Given this kind of coverage, the fact that enrollment in these two MCOs increased the likelihood that beneficiaries reported barriers to specialty care may reflect an initial

¹⁰Enrollees in SCHP can self-refer within the network for a limited set of services (preventive gynecological exams, dermatological services, immunizations, and an initial diagnostic mental health visit) but must obtain a referral from their PCP or authorization by the MCO for out-of-network services.

misunderstanding by some enrollees of the generosity of the POS benefits offered. After enrolling, some beneficiaries may have been disappointed and angry to learn that they could not visit specialists outside the network that they had seen previously without a referral from their PCP (in SCHP) or without incurring standard Medicare cost-sharing (in Peoples Health Network). The reporting of barriers to specialty care by these enrollees may be more a reflection of their disappointment and anger at not being able to *self-refer* to specialists as they had anticipated. This explanation is supported by our findings in Section G, which indicate that enrollees in POS products had a much poorer understanding of their benefits on average than enrollees in MCOs with no out-of-network coverage.

3. Effects for Beneficiary Subgroups

In the FFS sector of the demonstration markets, disabled beneficiaries, nonwhites, and those in poor physical and mental health were more likely to report access problems.¹¹ The effects of the demonstration did not vary much across subgroups, so the pattern observed in the FFS sector persisted in the MCOs (see Table V.5).

A substantial percentage of under-65 disabled beneficiaries and those in poor physical and mental health reported problems obtaining prescription drugs, both in the FFS sector and in the demonstration MCOs. For example, 29 percent of under-65 disabled nonenrollees reported that on at least one occasion, they had not gotten a prescription filled because of an inability to pay, and this percentage was not significantly reduced by enrollment in an MCO. Thus, financial barriers to

¹¹We measured physical and mental health using the SF-12 physical and mental component summaries (PCS and MCS, respectively). We classified beneficiaries by quartile using age-specific national norms (Ware et al. 1995). We refer to beneficiaries in the bottom quartile as being in poor health.

TABLE V.5

ESTIMATED EFFECTS ON ACCESS TO CARE FOR SELECTED SUBGROUPS

Subgroup	Always able to:													
	Get Tests and Treatments		Get an Appointment for Regular or Routine Care as Soon as Wanted		Be Seen for an Illness or Injury as Soon as Wanted		Get Prescription Medicine		Did Not Get Prescription Filled Because of Inability to Pay		Not Able to See a Specialist Despite Perceived Need (Negative Consequences)		Never Waited More Than 30 Minutes in Doctor's Office	
	Non-enrollee	Estimated	Non-enrollee	Estimated	Non-enrollee	Estimated	Non-enrollee	Estimated	Non-enrollee	Estimated	Non-enrollee	Estimated	Non-enrollee	Estimated
	Mean	Effect	Mean	Effect	Mean	Effect	Mean	Effect	Mean	Effect	Mean	Effect	Mean	Effect
Age														
Less than 65 years	65.9	3.1	53.4	12.4**	58.4	-0.2	80.3	0.5	29.6	-3.7	13.2	0.4	34.2	15.4***
65-79 years	82.3	2.0	66.9	10.3**	71.0	-0.2	88.8	0.3	8.3	-1.4	4.4	0.2**	43.8	15.8***
80 years or more	80.8	2.2	69.2	9.8*	77.1	-0.2	90.7	0.3	4.1	-0.7	1.9	0.1	42.5	15.9***
Race														
White	80.5	2.6*	68.4	6.2***	71.1	0.8	88.7	0.4	6.4	0.7	3.2	2.0**	44.0	14.2***
Nonwhite	76.9	2.9	68.3	6.2	63.5	0.9	86.3	0.5	15.0	1.5	7.8	4.2	40.2	14.1***
Health Status														
Excellent	83.3	2.6	72.6	9.0**	74.1	1.6	89.1	0.6	3.6	0.2	3.8	0.6***	53.2	12.1***
Very good/good	82.7	2.6	66.8	10.3*	71.2	1.7	89.0	0.6	5.8	0.2	3.5	0.5***	47.1	12.4***
Fair/poor	72.8	3.6	61.1	11.3***	65.8	1.9	86.0	0.7	16.4	0.5	6.9	1.0	35.4	12.0***
SF-12 Physical Component Summary*														
Top quartile	84.8	3.2	74.1	6.0**	73.5	7.2*	89.9	-0.6	3.5	-0.1	1.6	1.9**	51.7	17.0***
Middle quartiles	80.8	3.8	68.8	6.8*	66.6	8.2	89.5	-0.7	6.3	-0.1	2.5	2.9***	40.9	17.5***
Bottom quartile	72.0	4.9	61.2	7.7***	62.8	8.7	87.0	-0.8	18.2	-0.3	5.8	5.7	34.1	17.1***

TABLE V.5 (continued)

Subgroup	Always able to:															
	Get Tests and Treatments		Get an Appointment for Regular or Routine Care as Soon as Wanted		Be Seen for an Illness or Injury as Soon as Wanted		Get Prescription Medicine		Did Not Get Prescription Filled Because of Inability to Pay		Not Able to See a Specialist Despite Perceived Need (Negative Consequences)		Never Waited More Than 30 Minutes in Doctor's Office			
	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect
SF-12 Mental Component Summary*																
Top Quartile	85.8	5.2***	71.8	8.2***	74.5	3.0	90.6	0.9	5.5	-1.8 *	2.3	1.4	46.8	16.7***		
Middle Quartiles	76.9	7.6	67.2	9.0**	70.2	3.3	88.2	1.0	8.7	-2.7*	3.1	1.8*	42.2	16.7***		
Bottom Quartile	62.6	10.6	56.7	10.4*	58.9	3.8	82.5	1.4	25.2	-6.4	8.6	4.4	33.4	16.3***		

*Significant at the .10 level, two-tailed test.

**Significant at the .05 level, two-tailed test.

***Significant at the .01 level, two-tailed test.

*The classification of beneficiaries by SF-12 PCS and MCS was done by quartile, using age-specific national norms. Higher scores correspond to better health.

prescription drugs were a problem for the most vulnerable beneficiaries in the demonstration MCOs as well as in FFS Medicare.

E. EFFECTS ON SATISFACTION WITH CARE

1. Overall Effects

The demonstration significantly improved beneficiaries' satisfaction with the overall quality of care and with most aspects of care we examined (see Table V.6). For example, after we controlled for differences in beneficiary characteristics, enrollees were 9 percentage points more likely than nonenrollees to rate the overall quality of their care as excellent. Enrollees were also significantly more satisfied with the thoroughness of their care and with most dimensions of provider effectiveness, including the amount of time physicians spend with them, the clarity of physicians' explanations, and their listening skills.

The great majority of enrollees would recommend their MCO to a relative or friend, including one with a serious or chronic health problem. And while nonenrollees were not as satisfied as enrollees with most aspects of care, they were more likely than enrollees to recommend their usual source of care to a relative or friend. Thus, enrollees' responses to the questions on willingness to recommend their MCO apparently reflect not only their assessment of care, but also other considerations, such as uncertainty about whether their relatives or friends would be comfortable with the rules and restrictions of managed care.¹²

¹²The percentage of nonenrollees who would recommend their usual source of care was computed for the subset of the sample who had a usual source of care. All of the other satisfaction estimates in Table V.6 were produced for the entire sample of nonenrollees, including those without a usual source of care. However, even among beneficiaries with a usual source of care, enrollees were more satisfied than nonenrollees with the overall quality of care and with most dimensions of care. Thus, the different findings for the satisfaction questions and the "willingness-to-recommend" questions are not the result of using different samples for the two sets of comparisons.

TABLE V.6
EFFECTS OF THE DEMONSTRATION ON SATISFACTION WITH CARE
(Percentages)

Measures of Satisfaction	Enrollees	Nonenrollees	Difference	P-Value
Summary Measure				
Overall quality of care				
Excellent	50.7	42.2	8.5	0.00
Fair or poor	2.3	2.3	0.0	0.97
Provider Effectiveness				
Physicians listen carefully				
Always	81.4	75.4	6.0	0.00
Sometimes or never	5.7	5.7	0.1	0.95
Physicians explain things clearly				
Always	73.6	68.2	5.4	0.00
Sometimes or never	7.2	10.0	-2.9	0.00
Physicians spend enough time with patients				
Always	70.3	63.8	6.5	0.00
Sometimes or never	7.9	9.0	-1.2	0.25
Physicians know all they should know about a patient's medical history				
Always	70.3	68.7	1.5	0.36
Sometimes or never	8.4	8.8	-0.4	0.70
Physicians give high-quality medical care				
Always	77.4	70.9	6.5	0.00
Sometimes or never	6.3	5.9	0.4	0.64
Physician's office staff treats patients with courtesy and respect				
Always	86.9	83.1	3.9	0.00
Sometimes or never	3.3	3.4	0.0	0.95

TABLE V.6 (continued)

Measures of Satisfaction	Enrollees	Nonenrollees	Difference	P-Value
Provider Effectiveness, (cont'd)				
Thoroughness of medical treatment				
Excellent	49.9	42.0	7.8	0.00
Fair or poor	3.2	2.3	0.9	0.13
Overall rating of personal physician or nurse				
Excellent	52.0	51.4	0.6	0.73
Fair or poor	2.4	2.1	0.3	0.53
Overall rating of specialist seen most often in past six months				
Excellent	55.6	53.4	2.3	0.29
Fair or poor	3.5	2.3	1.3	0.07
Convenience				
Office location				
Excellent	50.2	44.7	5.5	0.00
Fair or poor	4.5	5.2	-0.7	0.34
Office hours				
Excellent	43.0	37.8	5.2	0.00
Fair or poor	3.0	3.6	-0.6	0.36
Willingness to Recommend				
Would recommend MCO/provider to family or friends	93.9	96.7	-2.7	0.00
Would recommend MCO/provider to family or friends with a serious or chronic health problem	88.7	91.4	-2.7	0.02
Maximum sample size*	1,918	2,633		

NOTE: Demonstration effects were estimated from logit models that control for differences between enrollees and nonenrollees. The estimated models were used to generate predicted probabilities for each individual as an enrollee and as a nonenrollee. The difference between the mean of these two predictions is the estimated effect of the demonstration.

*Numbers reflect the maximum sample size available for analysis. The sample size was smaller for some satisfaction questions because of item nonresponse.

2. MCO-Level Effects

Yellowstone Community Health Plan had the largest positive effects on satisfaction of all the MCOs in the demonstration MCOs (see Table V.7). This finding is consistent with the findings reported above on access to care. Health Alliance, which introduced Medicare managed care to small cities and rural communities in Illinois and Indiana, also increased beneficiaries' satisfaction with the overall quality of care. Findings for both MCOs reinforce the idea that introducing organized systems of care into small cities and rural settings has the potential to significantly improve access and satisfaction. It is also noteworthy that Yellowstone and Health Alliance were the only provider-sponsored MCOs in the demonstration that had HMO licenses and that served commercial members before the demonstration.¹³ This experience appears to have prepared them well for serving the Medicare population.

The three MCOs that had a significant positive effect on beneficiaries' satisfaction with the overall quality of care offered products with no out-of-network coverage. Some of the MCOs that offered POS products significantly improved beneficiaries' satisfaction with certain dimensions of care, but none significantly improved beneficiaries' satisfaction with the overall quality of care. In rating the overall quality of care, some enrollees in POS products may have downgraded their ratings because of the hassles caused by confusion about the POS benefit.

3. Effects for Beneficiary Subgroups

The estimated effects of the demonstration on satisfaction within selected beneficiary subgroups are similar to the effects on access. In the FFS sector, beneficiaries who are under 65, disabled, nonwhite, or in poor physical and mental health were less satisfied with care. However, the effects

¹³Health Partners also had an HMO license, but its members consisted almost entirely of Medicaid enrollees. Its employees were its only non-Medicaid members.

TABLE V.7

EFFECTS ON SATISFACTION WITH CARE, BY MCO

	Excellent Rating For:				Physicians Always:							
	Overall Quality of Care		Thoroughness of Medical Treatment		Listen Carefully		Explain Things Clearly		Spend Enough Time		Give High-Quality Medical Care	
	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect
All MCOs	42.2	8.5 ***	42.0	7.8 ***	75.4	6.0 ***	68.2	5.4 ***	63.8	6.5 ***	70.9	6.5 ***
PPO Product												
Independence Blue Cross	42.8	8.8	44.7	5.3	75.3	6.3	76.1	-2.4	64.4	7.5	73.8	3.0
POS Product												
People's Health Network	43.1	5.2	46.9	3.4	79.0	5.3	67.9	8.30	66.6	6.4	71.4	12.1 ***
Crozer-Keystone	45.8	-1.6	46.7	-3.5	76.7	0.8	68.4	1.8	64.2	4.9	70.5	3.0
Memorial Sisters of Charity	39.6	7.2	36.7	9.5 **	74.8	5.2	64.0	10.0 **	63.1	3.8	69.2	5.3
SCHP	41.2	2.3	41.6	3.1	74.8	4.3	61.8	12.9 ***	63.4	6.0	72.5	-4.5
No Out-of-Network Coverage												
Health Alliance	40.4	11.5 ***	41.1	8.1	77.5	3.6	67.3	7.6	65.6	5.2	70.3	7.9 **
Health Partners	47.5	-7.9	45.6	-8.1	81.6	1.2	75.0	-2.3	70.9	-6.0	72.9	-2.1
Mount Caramel	42.4	15.8 ***	41.4	15.6 ***	73.5	10.5 ***	66.2	7.6	62.8	9.8 **	70.4	13.5 ***
UCSD	46.7	5.3	48.3	8.50	68.9	4.0	66.5	2.4	57.0	11.4 **	65.6	6.9
Yellowstone	34.9	27.2 ***	34.8	27.0 ***	73.6	12.9 ***	61.5	15.2 ***	59.7	14.9 ***	71.0	13.3 ***

*Significant at the .10 level, two-tailed test.

**Significant at the .05 level, two-tailed test.

***Significant at the .01 level, two-tailed test.

of the demonstration on satisfaction did not vary much by subgroup, so these patterns persisted among enrollees (see Table V.8).

4. Comparison of Current Enrollees to Disenrollees

As expected, “current enrollees” (beneficiaries enrolled in the demonstration at the time of the interview) were more satisfied than disenrollees with their MCOs (see Table V.9).¹⁴ However, a relatively large percentage of disenrollees were satisfied with the care they had received from their MCO, and over two-thirds said they would recommend their MCO to a relative or friend. Only 12 percent of disenrollees rated the overall quality of care provided by their MCO as fair or poor. This is consistent with the findings reported in Chapter IV that indicate that disenrollees were a heterogeneous group who disenrolled for a variety of reasons, including many reasons unrelated to the quality of care they received.

5. Enrollees’ Satisfaction with MCO Customer Service

Most enrollees who contacted their MCO’s customer service for information or assistance had positive experiences. Overall, 47 percent reported that their calls had always been handled without a long wait, and 64 percent said they had always obtained the information or assistance they needed (see Table V.10). However, enrollees’ experiences varied considerably across MCOs. Surprisingly, Independence Blue Cross scored more poorly on these two measures than did most of the provider-sponsored MCOs. The two provider-sponsored MCOs that had HMO licenses and served

¹⁴Table V.9 presents unadjusted differences between current enrollees and disenrollees on their satisfaction with care. We did not control for differences in the characteristics of these two groups because our main interest was in presenting descriptive information on the experiences of those who disenrolled relative to those who remained enrolled.

TABLE V.8

EFFECTS ON SATISFACTION WITH CARE FOR SELECTED SUBGROUPS

	Excellent Rating For:				Physicians Always:							
	Overall Quality of Care		Thoroughness of Medical Treatment		Listen Carefully		Explain Things Clearly		Spend Enough Time		Give High-Quality Medical Care	
	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect
Total	42.2	8.5 ***	42.0	7.8 ***	75.4	6.0 ***	68.2	5.4 ***	63.8	6.5 ***	70.9	6.5 ***
Age												
Less than 65 years	39.8	6.8 ***	40.0	5.8 **	69.4	6.7 **	61.4	6.7 *	58.9	2.2	60.4	5.7 ***
65-79 years	44.0	7.0 ***	44.4	5.9 ***	76.3	5.7 ***	69.0	5.9 **	67.3	2.0 ***	74.0	4.6 ***
80 years or more	40.9	6.9	39.9	5.8	75.9	5.7	67.4	6.0	65.9	2.1	70.6	4.9
Race												
Nonwhite	36.4	9.4	33.7	8.3	77.6	5.8	69.3	5.6	67.0	7.2	67.5	6.8 *
White	42.5	9.8 ***	43.0	8.8 ***	74.8	6.4 ***	67.7	5.8 ***	62.5	7.9 ***	71.6	6.3 ***
Health Status												
Excellent	57.2	5.8 ***	56.8	3.6 ***	83.7	3.0 ***	78.6	3.3 ***	74.9	3.8 ***	81.8	3.7 ***
Very good/good	43.6	6.3 ***	44.9	3.9 ***	78.8	3.8 ***	71.1	4.1 ***	66.9	4.6 ***	74.6	4.8 ***
Fair/poor	37.5	6.0 **	37.4	3.7	68.9	4.8 *	60.3	4.8 *	56.4	5.1 *	61.9	6.0 **
SF-12 Physical Component Summary												
Top quartile	45.4	14.6 ***	46.9	10.1 ***	80.4	9.2 ***	75.1	8.9 ***	71.4	7.1 ***	79.0	5.3 **
Middle quartiles	37.7	14.2 **	40.0	9.8 **	71.7	12.3 **	64.1	11.3	63.0	8.3	72.1	6.4 **
Bottom quartile	36.1	14.2 ***	37.1	9.7 ***	63.9	14.5 **	57.4	12.4 **	55.0	9.0 ***	61.9	7.7 ***

TABLE V.8 (continued)

		Excellent Rating For:				Physicians Always:							
		Overall Quality of Care		Thoroughness of Medical Treatment		Listen Carefully		Explain Things Clearly		Spend Enough Time		Give High-Quality Medical Care	
		Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect	Non-enrollee Mean	Estimated Effect
SF-12	Mental Component Summary												
	Top quartile	48.2	11.5 ***	47.3	12.5 ***	79.9	7.4 ***	74.0	7.1 ***	67.7	10.6 **	77.5	9.4 ***
	Middle quartiles	39.8	11.3 **	38.2	12.1	73.6	9.1 **	66.4	8.4	60.4	11.9	67.3	12.2
	Bottom quartile	31.2	10.6 ***	32.1	11.6 ***	63.0	11.4 **	54.9	9.6 **	51.0	13.0 *	53.1	15.0 **

*Significant at the .10 level, two-tailed test.

**Significant at the .05 level, two-tailed test.

***Significant at the .01 level, two-tailed test.

TABLE V.9
COMPARISON OF ALL ENROLLEES, CURRENT ENROLLEES,
AND DISENROLLEES ON SATISFACTION WITH CARE
(Unadjusted Percentages)

Measures of Satisfaction	All Enrollees	Current Enrollees	Disenrollees	Difference	P-Value
Summary Measure					
Overall quality of care					
Excellent	49.5	50.7	37.6	-13.2	0.00
Fair or poor	2.5	1.8	11.8	10.0	0.00
Provider Effectiveness					
Physicians listen carefully					
Always	81.6	82.6	71.1	-11.5	0.00
Sometimes or never	5.8	5.1	13.8	8.8	0.00
Physicians explain things clearly					
Always	74.0	74.5	69.1	-5.4	0.20
Sometimes or never	7.1	6.4	14.6	8.2	0.01
Physicians spend enough time with patients					
Always	70.8	70.8	68.3	-2.6	0.54
Sometimes or never	7.9	7.4	14.5	7.1	0.02
Physicians know all they should know about a patient's medical history					
Always	70.9	71.1	63.6	-7.6	0.09
Sometimes or never	8.7	8.0	17.7	9.8	0.00
Physicians give high-quality medical care					
Always	77.6	78.3	68.2	-10.1	0.02
Sometimes or never	6.2	5.3	16.6	11.3	0.00
Physician's office staff treats patients with courtesy and respect					
Always	87.5	88.3	77.6	-10.7	0.00
Sometimes or never	3.0	2.6	8.2	5.6	0.02
Thoroughness of medical treatment					
Excellent	48.5	49.4	40.3	-9.1	0.05
Fair or poor	3.3	2.9	8.6	5.7	0.01

TABLE V.9 (continued)

Measures of Satisfaction	All Enrollees	Current Enrollees	Disenrollees	Difference	P-Value
Provider Effectiveness (cont'd)					
Overall rating of personal physician or nurse					
Excellent	51.5	52.0	50.6	-1.4	0.73
Fair or poor	2.6	2.2	7.3	5.1	0.01
Overall rating of specialist seen most often in past six months					
Excellent	52.2	53.3	44.6	-8.7	0.08
Fair or poor	3.7	3.3	6.7	3.3	0.17
Convenience					
Office location					
Excellent	49.6	51.3	34.2	-17.0	0.00
Fair or poor	4.3	4.0	8.4	4.4	0.07
Office hours					
Excellent	42.3	43.0	34.0	-9.0	0.04
Fair or poor	3.0	2.5	9.7	7.2	0.00
Willingness to Recommend					
Would recommend MCO/provider to family or friends	94.0	96.1	69.1	-27.0	0.00
Would recommend MCO/provider to family or friends with a serious or chronic health problem	89.0	91.3	61.7	-29.6	0.00
Maximum sample size*	3267	3051	216		

NOTE: Estimates in this table are unadjusted percentages

*Numbers reflect the maximum sample size available for analysis. The sample size was smaller for some satisfaction questions because of item nonresponse.

TABLE V.10

ENROLLEES' SATISFACTION WITH THEIR MCOs CUSTOMER SERVICE
(Percentages)

MCO	Calls to Customer Service for Information or Assistance Were Handled without a Long Wait				All the Information or Assistance Was Obtained				Percent Who Contacted the MCO with a Complaint or Problem	Percent Whose Complaint Was Settled to Their Satisfaction
	Always	Usually	Sometimes	Never	Always	Usually	Sometimes	Never		
Total	47.4	20.2	16.4	16.0	64.1	18.3	13.2	4.4	12.1	62.0
PPO Product										
Independent Blue Cross	29.5	27.1	24.4	19.0	47.7	21.4	24.5	6.5	15.3	60.0
POS Product										
People's Health Network	42.8	16.4	15.5	25.2	66.3	11.9	12.1	9.7	14.2	47.6
Crozer-Keystone	50.0	16.5	15.5	18.0	69.7	17.4	10.1	2.7	11.0	61.9
Memorial Sisters of Charity	41.6	21.6	19.8	17.0	54.6	24.2	16.6	4.5	13.0	73.1
SCHP	46.3	23.3	14.6	15.8	64.2	15.0	16.4	4.4	24.1	75.0
No Out-of-Network Coverage										
Health Alliance	69.4	13.5	5.9	11.2	79.1	14.9	2.5	3.4	9.4	76.3
Health Partners	39.3	16.8	15.9	27.9	63.7	15.6	14.3	6.4	15.3	43.4
Mount Carmel	70.7	15.7	9.5	4.0	86.1	12.9	0.9	0.0	4.7	63.4
UCSD	40.0	26.7	22.6	10.9	45.5	29.3	20.5	4.7	18.9	45.0
Yellowstone	61.9	15.4	5.8	16.9	84.2	12.4	0.8	2.6	10.2	64.8

commercial enrollees before the demonstration (Health Alliance and Yellowstone) were among the highest scoring MCOs on these two measures of customer service, which is not surprising, since they had customer service departments in place for their commercial clients. However, the highest scoring MCO was Mount Carmel, which obtained an HMO license specifically for the demonstration and thus had limited experience in providing customer service to an enrolled population.

F. USE OF PREVENTIVE CARE

We estimated the effects of the demonstration on the likelihood that enrollees would receive three preventive services: flu shots, physical exams, and mammograms. Overall, the MCOs had no effect on the probability that beneficiaries would receive a flu shot (see Table V.11). However, the MCO-specific estimates indicate that Health Alliance and People's Health Network increased the probability of receiving a flu shot. The effectiveness of Health Alliance in increasing the receipt of flu shots is not surprising, since this MCO would have been expected to have developed systems for encouraging the use of preventive care because it operated a commercial HMO business for approximately 10 years.

Our regression-adjusted estimates indicate that enrollees were *less* likely than nonenrollees to have received a physical exam in the past 12 months (see Table V.11).¹⁵ This is surprising, since physical exams were covered by all of the MCOs but are not covered by Medicare. However, we suspect that our estimates overstate the percentage of nonenrollees who received a physical exam because, in responding to this question, they may have defined physical exam more broadly than enrollees did. Some nonenrollees who reported having had a physical exam may have been referring to a physician visit for an illness or injury in which the physician performed some routine

¹⁵The analysis of physical exams and mammograms was limited to both enrollees who had been in their MCO for at least a year and nonenrollees who had been in Medicare FFS for at least a year.

TABLE V.11

COMPARISON OF ENROLLEES AND NONENROLLEES ON PREVENTIVE CARE:
 PERCENTAGE RECEIVING FLU SHOTS AND PHYSICAL EXAMS
 (Predicted means, adjusted for differences in beneficiary characteristics)

Measures of Preventive Care	Total	MCOs with Self-Referral Option					MCOs without Self-Referral Option				
		Indep. Blue Cross	People's Health Network	Crozer-Keystone	Memorial Sisters of Charity	SCHP	Health Alliance	Health Partners	Mount Carmel	UCSD	Yellowstone
Percentage Receiving a Flu Shot											
Enrollees	69.8	70.7	64.1	69.9	69.8	57.4	78.6	55.7	73.1	73.7	73.2
Nonenrollees	69.0	75.7	56.2	68.7	65.0	62.0	65.6	59.4	73.0	76.0	73.4
Difference	0.8	-5.0	7.9	1.3	4.9	-4.6	13.0	-3.7	0.2	-2.3	-0.2
P-Value	0.64	0.21	0.09	0.78	0.24	0.31	0.00	0.50	1.96	0.60	1.96
Percentage Receiving a Physical Exam											
Enrollees	75.8	78.7	80.3	80.2	72.1	79.4	83.3	76.3	71.2	80.3	74.1
Nonenrollees	84.8	87.8	87.2	90.0	81.5	87.0	86.8	89.6	78.8	89.5	87.5
Difference	-9.0	-9.1	-6.8	-9.8	-9.5	-7.6	-3.4	-13.2	-7.5	-9.2	-13.3
P-Value	0.00	0.01	0.08	0.01	0.03	0.14	0.46	0.00	0.04	0.02	0.00

NOTE: The estimates presented are predicted means obtained from logit models that control differences between enrollees and nonenrollees on socioeconomic characteristics, health and functional status, and attitudes toward health care.

procedures, such as checking the patient's blood pressure. While this may have been the case for some enrollees also, we believe that this is less likely because the explanation of their MCO's benefits provided information on physical exams and the fact that they are not covered under Medicare.

We also estimated the effect of the demonstration MCOs on the likelihood that female enrollees would have received a mammogram during the previous 12 months. Leading authorities vary considerably in their recommendations for mammograms. Most recommend screenings starting at age 50, but they vary as to whether the screenings should be every year or ever two years, and in terms of whether an upper age limit should be placed on such screenings.¹⁶ Medicare covers mammograms every year for women age 40 and older as well as one baseline mammogram between the ages of 35 and 39. Given the disagreement among authorities about the appropriate frequency and age range for mammography screening, we conducted the analysis of mammography screening for women in the following age groups: 50 to 69, 70 to 74, and 75 and older.

Our regression-adjusted estimates indicate that female enrollees in each group were less likely than female nonenrollees to have received a mammogram in the previous 12 months (see Table V.12).¹⁷ Because some authorities recommend mammography screening every two years rather than every year, these estimates cannot be interpreted as measuring the percentage of beneficiaries who received appropriate screening. However, our finding that enrollees were less likely than nonenrollees to have received a mammogram over the previous 12 months suggests that the

¹⁶The U.S. Preventative Services Task Force (1996) recommends mammography screening every one to two years for women ages 50 to 69 but indicates that there is insufficient evidence to recommend for or against routine mammography for women age 70 or older. The American Cancer Society and the American Medical Association recommend annual mammograms beginning at age 50, with no upper age limit specified, whereas the American College of Physicians recommends mammograms every two years for women ages 50 to 74 but not for those age 75 or older.

¹⁷Sample sizes were too small to conduct this analysis for individual MCOs.

TABLE V.12

**COMPARISON OF FEMALE ENROLLEES AND
NONENROLLEES: PERCENTAGE WHO RECEIVED
A MAMMOGRAM IN THE PAST YEAR**

(Predicted means, adjusted for differences in beneficiary characteristics)

	Predicted Means by Age Group		
	50 to 69	70 to 74	75 and over
Enrollees	70.1	61.3	48.8
Nonenrollees	78.5	76.2	70.2
Difference	-8.3	-14.9	-21.4
P-Value	0.04	0.00	0.00

NOTE: The estimates presented are predicted means obtained from logit models that control differences between enrollees and nonenrollees on socioeconomic characteristics, health and functional status, and attitudes toward health care.

demonstration MCOs may have been less effective than other area providers in encouraging mammography screening.

G. ENROLLEES' UNDERSTANDING OF THEIR MCOs

A substantial minority of enrollees (29 percent) reported knowing little or nothing about how their MCO works and how to get services paid for (see Table V.13). This is a potentially serious problem, since lack of understanding of an MCO's rules and procedures can limit or delay an enrollee's access to care and can expose enrollees to unexpected out-of-pocket costs. Disenrollees had a much poorer understanding than current enrollees of their MCOs. Overall, almost half of the disenrollees knew nothing or only a little about how their MCO works and how to get services paid for. It is very likely that this lack of understanding contributed to the decision of many of these individuals to disenroll.

TABLE V.13

**ENROLLEES' SELF-RATED KNOWLEDGE OF HOW
THEIR MCO WORKS AND HOW TO GET
SERVICES PAID FOR**

	Percentage Who Say They Know:			
	Nothing	A Little	Some	A Lot
All Enrollees	7.7	21.3	30.2	40.9
Current Enrollees	6.4	20.7	30.7	42.3
Disenrollees ^a	21.3	27.2	25.1	26.3
PPO Product				
Independence Blue Cross	5.8	21.9	30.7	41.6
POS Product				
People's Health Network ^b	11.2	26.1	31.4	31.4
Crozer-Keystone	13.5	26.1	32.8	27.5
Memorial Sisters of Charity	7.2	20.1	33.0	39.8
SCHP	9.2	24.8	33.5	32.4
No Out-of-Network Coverage				
Health Alliance	4.2	12.0	27.8	56.0
Health Partners	19.8	36.8	31.6	11.7
Mount Carmel	4.1	18.2	26.7	51.0
UCSD	5.7	13.8	29.3	51.1
Yellowstone	3.1	11.5	23.3	62.1

^aThe distribution of self-rated understanding for disenrollees differs from that for current enrollees and is statistically significant at the .01 level, two-tailed test.

^bPeople's Health Network offers a triple option product.

Enrollees in Health Partners had the lowest levels of understanding among the demonstration enrollees. One-fifth of them reported knowing nothing about how the MCO works or how to get services paid for, while only 12 percent reported knowing a lot about these subjects. We expect that this outcome partly reflects the fact that the low-income, inner city population served by Health Partners has lower education than the populations served by the other MCOs and probably less exposure to managed care through employer-sponsored plans before they became eligible for Medicare. However, the situation may also partly reflect ineffective educational efforts by Health Partners.

Except for enrollees in Health Partners, enrollees in the other MCOs that did not offer out-of-network coverage understood their MCOs better than did enrollees in MCOs that offered PPO and POS products. This is not surprising, since PPO and POS products are more complex.

Enrollees who joined MCOs with no out-of-network coverage generally understood the limitations of that coverage. According to correct answers to a true/false question, 89 percent of those with no out-of-network coverage understood that their choice of doctors and hospitals was limited to network providers (see Table V.14). Disenrollees were just as likely as current enrollees to understand this fact. Enrollees in Health Partners were the least likely to understand this feature of their MCO (81 percent).

Beneficiaries enrolled in MCOs that offered out-of-network coverage were asked a true/false question as to whether they agreed that out-of-network coverage was available and required higher copayments.¹⁸ Overall, only 62 percent of such enrollees answered that question correctly.

¹⁸This question read, "As a member of [], I have coverage for visits to doctors who are not part of [], but I must pay more out-of-pocket to see these doctors."

TABLE V.14

ENROLLEES' UNDERSTANDING OF OUT-OF-NETWORK COVERAGE

	Percentage Who Understand That They Have Out-of-Network Coverage but Face Higher Cost Sharing	Self-Rated Knowledge of Additional Cost Sharing Required				
		Excellent	Very Good	Good	Fair	Poor
All Enrollees in a POS/PPO Product	62.1	19.5	24.0	29.0	14.4	13.1
Current Enrollees	64.7	19.4	24.4	30.0	14.5	11.7
Disenrollees ^a	40.5	20.1	20.9	21.4	13.5	24.2
PPO Product						
Independence Blue Cross	62.3	22.6	24.2	28.8	12.6	11.7
POS Product						
People's Health Network ^h	75.6	25.4	24.7	24.8	12.1	13.0
Crozer-Keystone	59.4	16.0	23.0	31.4	16.7	13.0
Memorial Sisters of Charity	58.7	17.0	25.6	28.7	15.3	13.3
SCHP	62.5	16.3	16.9	32.5	16.2	18.1
Percent Who Understand That Their Choice of Doctors and Hospitals Is Limited to the MCO's Network						
All Enrollees in MCOs Offering No Out-of-Network Coverage	88.7					
Current Enrollees	88.9					
Disenrollees (a)	86.3					
By MCO						
Health Alliance	91.6					
Health Partners	81.1					
Mount Carmel	89.7					
UCSD	91.1					
Yellowstone Community Health Ctr.	89.5					

^aThe difference between enrollees and disenrollees is statistically significant at the .01 level for all estimates pertaining to POS or PPO products. The difference between enrollees and disenrollees is not statistically significant for the estimate pertaining to MCOs offering no out-of-network coverage.

^hPeople's Health Network offers a triple option product.

Some respondents who did not understand that they had out-of-network coverage with a higher cost-sharing requirement still self-rated their understanding of out-of-network coverage highly. While 35 percent of current enrollees did not answer the true/false question on out-of-network coverage correctly, only 26 percent admitted that their understanding of such coverage was only fair or poor. The discrepancy was greater for disenrollees: almost 60 percent did not answer the question on out-of-network coverage correctly, but only 38 percent acknowledged that their understanding of such coverage was only fair or poor. This indicates either that some beneficiaries may not be fully aware of how little they understand about their MCO or that they do not wish to admit to a lack of understanding.

In general, more vulnerable subgroups such as less educated beneficiaries, minorities, those with a low income, dual eligibles, and those in poor health did not understand the MCO as well as their counterparts (see Table V.15). For example, one in six nonwhites reported knowing nothing about how their MCO works, and one in four nonwhites enrolled in an MCO with no out-of-network coverage did not understand that they were limited to network physicians. This suggests that better educational efforts are needed to ensure that such beneficiaries understand how to use their MCO.

H. ENROLLEES' USE OF OUT-OF-NETWORK SERVICES

Nine percent of demonstration enrollees reported that they had received services from a physician outside of their MCO's network (see Table V.16). Enrollees in POS and PPO products were not substantially more likely to have gone outside the network for physician services than were enrollees in products with no out-of-network coverage. Among the MCOs that offered out-of-network coverage, the percentage of enrollees who had gone outside the network for physician services varied from 7 percent in Independence Blue Cross's PPO product to 12 percent in Crozer-Keystone's POS product. Among MCOs that did not provide out-of-network coverage, the

TABLE V.15

ENROLLEES' UNDERSTANDING OF THEIR MCO BY BENEFICIARY SUBGROUP

	Self-Rated Knowledge of How MCO Works and How to Get Services Paid for (% who said they know) ^a				Percentage of Enrollees in PPO/POS Products Who Understand They Have Out-of-Network Coverage with a Higher Copayment ^b	Percentage of Enrollees in MCOs with No Out-of-Network Coverage Who Understand That Their Choice of Doctors and Hospitals Is Limited ^b
	Nothing	A Little	Some	A Lot		
All Enrollees	7.7	21.3	30.2	40.9	62.1	88.7
Age						
< 65	9.4	18.6	36.7	35.2	56.5	81.8
65 - 79 (R)	6.6	20.0	30.0	43.3	63.0	90.9
>= 80	10.9	27.4	27.7	34.0**	61.4	86.1
Years of Education						
< 12	14.9	30.6	28.8	25.7**	58.9	86.1
12 (R)	4.2	19.8	33.4	42.6	59.2	87.6
> 12	3.5	12.3	28.0	56.2**	68.5**	92.7**
Race						
White (R)	5.4	18.0	30.4	46.2	64.1	91.4
Nonwhite	17.0	34.5	28.7	19.9**	55.1*	75.2**
Income						
< \$10,000	14.8	29.0	29.7	26.5**	51.7**	83.3
\$10,000 to \$20,000 (R)	7.5	23.9	30.0	38.6	63.8	88.2
> \$20,000	3.8	12.4	31.2	52.6**	66.5	92.7*
On Medicaid						
Yes (R)	21.5	33.7	29.9	14.8	49.3	78.2
No	6.4	20.1	30.2	43.3**	63.0*	90.0**
Health Status						
Excellent	8.0	20.9	23.5	47.70	66.4	88.1
Very good/good (R)	5.8	19.0	31.1	44.1	63.8	88.5
Fair/poor	11.4	26.5	31.5	30.6**	56.5*	89.2

^aA Chi-square test of statistical significance was conducted on the distribution of enrollees' self-rated knowledge.^bT-tests were conducted on understanding of out-of-network coverage.

*Indicates a difference of statistical significance at the .05 level. In cases with 3 subgroups, the middle subgroup was used as the base group for comparison.

**Indicates a difference with statistical significance at the .01 level across subgroups.

TABLE V.16

USE OF OUT-OF-NETWORK SERVICES

MCO	Physician Visits		Out-of-Pocket Costs for Out-of Network Services				
	Percentage Who Received Physician Services Outside the Network	Mean Number of Visits Outside the Network ^a	< \$100	\$101 to \$200	\$201 to \$500	\$501 to \$1,000	> \$1000
All Enrollees	9.0	2.9	74.3	11.8	9.9	1.7	2.2
Current Enrollees	8.6	2.8	74.0	12.3	10.0	1.9	1.9
Disenrollees	12.6	4.0	76.5	8.5	9.5	0.8	4.8
PPO Product							
Independence Blue Cross	7.3	2.9	70.2	12.6	12.9	4.3	0.0
POS Product							
People's Health Network ^b	10.8	3.0	73.5	13.0	5.6	5.4	2.6
Crozer-Keystone	11.6	3.3	81.8	9.0	5.8	0.0	3.4
Memorial Sisters of Charity	8.8	3.8	72.4	12.0	12.9	0.0	2.8
SCHP	11.1	4.1	66.1	18.1	5.4	10.5	0.0
No Out-of-Network Coverage	8.8	2.3	77.1	9.4	10.8	0.0	2.7
Health Alliance	8.3	2.0	80.7	9.6	6.2	0.0	3.5
Health Partners	10.0	2.9	83.3	10.0	2.7	0.0	4.1
Mount Carmel	8.3	2.1	71.0	9.2	17.3	0.0	2.5
UCSD	9.1	2.1	64.7	29.6	0.0	2.7	3.0
Yellowstone	9.7	2.1	87.1	8.9	4.0	0.0	0.0

NOTE: The estimates in this table are based on 285 respondents who received out-of-network services, broken out as follows. There were 255 current enrollees and 30 disenrollees. Across both groups, 160 were enrolled in PPO or POS products, and 125 were enrolled in products with no out-of-network coverage.

^aThis mean was estimated across all enrollees who had at least one out-of-network visit.

^bPeople's Health Network offers a triple option product.

corresponding range was from 8 percent to 10 percent. The relatively low use of out-of-network services by enrollees in PPO or POS products is not surprising, since these MCOs tried to limit the use of such services by restricting the number or types of services that enrollees could receive outside the network or by imposing much higher cost-sharing for out-of-network services.

Overall, seventy-four percent of the enrollees who used out-of-network services spent less than \$100 out of pocket for these services, but four percent reported spending more than \$500. The highest percentage of enrollees who had spent more than \$500 out of pocket for out-of-network services (10 percent) were enrolled in SCHP's POS product. SCHP required the highest coinsurance (30 percent) for out-of-network services of the MCOs that offered out-of-network coverage.

Of those enrollees who went outside their MCO's network, 64 percent did so to receive specialist's services (see Table V.17). This was the predominant type of service received outside the network by enrollees in PPO and POS products, as well as among enrollees in products with no out-of-network coverage. The second most common type of service for which enrollees went out of network was diagnostic tests, which were received by 29 percent of enrollees who went out of network. The predominant reason enrollees gave for going outside their MCO's network was to see the same doctor they had seen before enrolling in a demonstration MCO. Overall, 35 percent of enrollees who used out-of-network services did so for this reason.

TABLE V.17

TYPES OF AND REASONS FOR SERVICES RECEIVED OUT OF NETWORK

	All Enrollees	Enrollees in PPO and POS Products	Enrollees in Products with No Out-of-Network Coverage
Type of Services Received Outside the Network^a			
Percentage receiving each type of service			
Visits to specialists	63.7	63.5	64.1
Diagnostic tests	29.1	30.3	27.2
Surgical procedures	13.6	9.7	19.3
Prescriptions	7.1	7.8	6.1
Mental health care	5.3	7.8	1.7
Other	8.4	7.6	9.6
Reasons for Receiving Services Outside the Network^b			
Percentage reporting at least one of the reasons below			
Dissatisfied with plan doctors	7.6	9.1	5.4
Service not covered by plan	12.5	13.6	10.8
Did not want to ask personal doctor or nurse for referral	6.1	5.6	7.0
Could not get services quickly enough through plan	7.8	6.5	9.8
Could not get a referral from personal physician or plan	3.1	3.4	2.7
Plan's offices or clinic was too far	34.6	2.5	4.1
Wanted to use the same doctor as used before enrolling		36.2	32.1
Did not know would have to pay out-of-pocket when visiting doctors who are not part of plan	4.0	4.0	3.9
Service was covered by other insurance	1.7	0.2	4.0
Service was covered by Medicaid	0.8	0.7	0.9
Other	15.2	9.6	23.7

^aEstimates are based on 297 respondents that received out-of-network services, 169 were enrolled in PPO or POS products and 128 were enrolled in products with no out-of-network coverage.

^bEstimates are based on 276 respondents that reported their reasons for receiving out-of-network services; 159 were enrolled in PPO or POS products and 117 were enrolled in products with no out-of-network coverage.

VI. CONCLUSIONS

In this final report for the evaluation of the Medicare Choices Demonstration, we addressed three topics. First, we described the characteristics of the 13 MCOs that participated in the demonstration, the products they offered, and their operational experience and ultimate success. Second, we assessed the direction and magnitude of biased selection and its implications for Medicare program costs. Most of the demonstration MCOs are sponsored by providers, and many offer POS or PPO products. It was important to determine whether these features led to more neutral selection than has been experienced by Medicare risk HMOs. Finally, we assessed the effects of the demonstration on access to and satisfaction with care. Access and satisfaction are related concepts that together provide a broad picture of the quality, extent, and outcomes of care from the beneficiary's perspective.

A. SUMMARY OF KEY FINDINGS

1. MCO Characteristics and Experiences

a. Background and History

All of the demonstration MCOs except Independence Blue Cross are (or were until very recently) sponsored by provider systems. Before the demonstration, these MCOs had varying degrees of managed care experience, which most of them obtained by accepting "downstream" risk from HMOs. All but one of the 12 provider-sponsored entities were ineligible for the Medicare risk program when the solicitation for the Medicare Choices Demonstration was released. Nine were ineligible because they did not have an HMO license, one was ineligible because it did not meet the risk program's minimum enrollment requirement, and one did not meet the enrollment composition

rule (which required that Medicare and Medicaid enrollees not account for more than 50 percent of an organization's total enrollment).

The nine provider-sponsored MCOs that were ineligible for the Medicare risk program participated in the demonstration under three kinds of authority. Four were permitted by their state to participate without an HMO license. Four other provider-sponsored MCOs obtained an HMO license after the demonstration solicitation was released, and one operated under the license of a subsidiary.

b. Benefit Offerings

Each demonstration MCO offered only one type of product. When they began operations, 7 of them offered traditional HMO products, and 6 offered alternative products. Of these 6, 4 offered POS products (including 1 triple-option product from 1 MCO), 1 offered a PPO product, and 1 offered a product we have classified as an exclusive provider organization (EPO) product. All 13 demonstration MCOs provided additional benefits that are not covered under the FFS Medicare program. Twelve MCOs offered outpatient prescription drug coverage. Each imposed a dollar limit on such coverage, which ranged from \$500 to \$2,500 per year. Other benefits provided by most MCOs included vision exams, eyeglasses, hearing exams, and hearing aids.

Most MCOs did not change their benefit offerings between their first and second year of operations. Those that did made small changes. However, seven of the eight MCOs still participating in 2000 substantially changed their benefits this year. Most reduced the generosity of their benefits, but some made the package more generous or otherwise restructured their benefit package. Two MCOs began offering multiple benefit packages, three instituted or raised premiums, three increased their copayments for physician office visits and one reduced its copayment for

specialist visits (while not requiring a copayment for PCP visits), and three increased their copayments for emergency room visits.

The changes in prescription drug benefits were more varied and complex. Two MCOs introduced a three-tiered copayment structure in which the lowest copayment was for generic drugs, a higher copayment was for preferred brand-name drugs, and the highest copayment was for nonpreferred brand-name drugs. Two other MCOs increased their copayments for drugs, one raised its annual limit, and one reduced its annual limit but began applying this limit to brand-name drugs only.

c. The Implications of Provider Sponsorship

The fact that 12 of the demonstration MCOs were sponsored by providers had important implications for their approach to and experiences under the demonstration. In marketing their demonstration products, most provider-sponsored MCOs differentiated themselves from traditional insurers and HMOs by highlighting their historic local presence in the community, their reputation for quality, and their hospitals' nonprofit status. Physician endorsement or support was also an important component of the marketing campaign for five MCOs.

Provider sponsorship also influenced the product design of some MCOs, their approach to care management, and the distribution of risk among the MCO and its network providers. Two provider-sponsored MCOs that withdrew from the demonstration acknowledged that their failure was due in part to poor product design caused by inexperience with managed care and, for one of the two MCOs, attempts to avoid aspects of managed care disliked by providers and patients. More than half of the provider-sponsored MCOs had difficulty with one or more of the following during their first year of operation: establishing positive provider relations, establishing appropriate provider incentives, and changing practice patterns. As several MCOs mentioned, these difficulties arose in

part from the often great differences in philosophy and goals associated with running a provider organization such as a hospital and running an MCO. In addition to the difficulties in building a different type of professional relationship with providers, the provider-sponsored MCOs could not transfer risk as a traditional HMO would. That is, the risk downstreamed to providers was often still contained within the same provider system that sponsored the MCO.

d. Encounter Data Submission

All MCOs participating in the demonstration were required to submit encounter data for all Medicare services received by their enrollees—essentially, all information on a Medicare FFS claim. However, the process of submitting data has been plagued by significant problems, delaying the application of the HCC payment method and frustrating the MCOs. As of April 2000, no MCO had submitted complete encounter data on its enrollees.

The MCOs complained that it was difficult to collect some of the information traditionally included in a Medicare FFS claim. In addition, some have had trouble providing the data in the proper format and in communicating with the carriers and fiscal intermediaries. Most MCOs have found the encounter data submission process to be very burdensome.

e. MCO Financial Experience

Given the substantial start-up costs for a new product, all of the MCOs anticipated losing money in the first several years of operation. However, five MCOs withdrew from the demonstration because their losses were much higher than expected. The other MCOs experienced losses that were closer to expectations. The MCOs attributed the higher-than-expected losses to a variety of factors, including higher-than-expected utilization, low enrollment, and high administrative costs (including

the costs of submitting encounter data). In addition, two MCOs acknowledged that poor product design contributed to their financial losses.

f. Impact of the BBA

Several MCOs cited the administrative burden of the BBA as "enormous" and as a "threat to their viability." Also, in making the demonstration MCOs just like other M+C organizations, the BBA essentially "stole the demonstration's thunder." Rather than receiving special attention and support from HCFA, the demonstration MCOs became one of hundreds of MCOs responding to regulation changes and struggling to meet new requirements. In addition, the changes in the way payment rates are calculated under the BBA were less of a boost than what MCOs in low-payment areas expected, and the legislation's budget neutrality provisions meant that increases were minimal in higher payment areas.

2. Disenrollment, Biased Selection, and Effects on Medicare Costs

a. Disenrollment

Thirteen percent of demonstration enrollees disenrolled within 12 months after joining their MCO. Disenrollment rates varied substantially, ranging from 5 percent at Mount Carmel and Yellowstone to 28 percent at St. Joseph's. On average, the 12-month disenrollment rate in MCOs with a POS product was nearly twice as high as in MCOs with no out-of-network coverage (17 percent versus 9 percent). The higher disenrollment among enrollees in a POS product may be a result of not understanding, at the time of enrollment, the limitations on the POS benefit.

Beneficiaries disenrolled for a variety of reasons. Twenty-eight percent disenrolled primarily for reasons related to costs or benefits, 21 percent disenrolled because of problems with providers,

12 percent moved out of the MCO's service area, another 12 percent cited various service related problems, and 9 percent disenrolled because of access problems.

b. Biased Selection

Overall, the demonstration MCOs experienced favorable selection, although to a substantially lesser extent than has been reported for Medicare risk HMOs. The fact that 12 of the 13 MCOs were sponsored by provider systems and 6 offered products with at least some out-of-network coverage may have made these MCOs more attractive than Medicare risk HMOs to a more representative mix of enrollees.

After adjusting for differences in demographic risk factors, we found that baseline expenditures for enrollees were 7 percent lower than for nonenrollees. Using the same methods, Hill and Brown (1990) found that prior expenditures for Medicare risk enrollees were 23 percent lower than for nonenrollees. The direction and magnitude of biased selection varied significantly across MCOs and likely reflects differences in product design, market characteristics, sponsorship, and marketing strategy. Based on the adjusted baseline expenditures, all of the MCOs offering POS products had neutral selection, while four of the seven MCOs with no out-of-network coverage had favorable selection. Independence Blue Cross had favorable selection in its PPO product.

We reach a similar conclusion in measuring selection by the prevalence of high cost conditions in enrollees versus nonenrollees (from the baseline claims data). In addition, our comparison of mortality rates also implies that the demonstration MCOs experienced favorable selection. A larger number of MCOs experienced favorable selection when it was measured by mortality rates than by baseline expenditures or the prevalence of high-cost conditions. However, mortality rates capture only one aspect of biased selection, since they provide no information on the health status of beneficiaries who survived.

The measures of self-reported health status obtained from the survey indicate that the greatest differences between enrollees and nonenrollees are in the prevalence of functional limitations. After controlling for differences in demographic risk factors, we found that enrollees were three to four percentage points less likely than nonenrollees to have limitations in ADLs and three to five percentage points less likely to have limitations in IADLs. The adjusted estimates indicate that two groups did not differ with respect to either the SF-12 summary measures of physical and mental health, or the prevalence of most serious medical conditions.

c. Effects on Medicare Costs

We estimated the effects of the demonstration on Medicare costs by comparing the capitation payments the MCOs received from HCFA with an estimate of the Medicare expenditures that enrollees would have incurred under FFS Medicare. Overall, the capitation payments HCFA made for demonstration enrollees did not differ significantly from the expenditures HCFA would have incurred for those individuals in FFS. The effects on Medicare costs varied across MCOs in a manner that is consistent with the findings on biased selection. As a group, the MCOs with no out-of-network coverage received payments that were 6 percent higher than the expenditures that would have been incurred for their enrollees in FFS Medicare, while the MCOs with POS products received payments that were 6 percent lower than the expenditures that would have been incurred for their enrollees in the FFS sector.

3. Effects on Access to and Satisfaction with Care

a. Overall Effects

Demonstration enrollees and nonenrollees had comparable access to care, after we controlled for differences between the two groups in beneficiary characteristics. The demonstration MCOs had

no effect on some access measures, improved access on others, and reduced access on still other measures. On most measures for which the MCOs either increased or reduced enrollees' access, the effects were modest.

The demonstration significantly improved beneficiaries' satisfaction with the overall quality of care and with most aspects of care we examined. For example, after we controlled for differences in beneficiary characteristics, enrollees were 9 percentage points more likely than nonenrollees to rate the overall quality of their care as excellent (51 percent versus 42 percent). Enrollees were also significantly more satisfied with the thoroughness of their care and with most dimensions of provider effectiveness, including the amount of time physicians spent with them, the clarity of physicians' explanations, and their listening skills.

b. MCO-Level Effects

Effects on access and satisfaction varied across MCOs. Yellowstone Community Health Plan, which introduced Medicare managed care to Billings, Montana and the surrounding rural areas, had the largest positive effects on access and satisfaction of all the demonstration MCOs. After we controlled for differences in beneficiary characteristics, Yellowstone enrollees were 10 percentage points more likely than nonenrollees to always get the tests and treatments they needed (88 percent versus 78 percent) and 27 percent more likely to rate the overall quality of their care as excellent (62 percent versus 35 percent). Health Alliance, which introduced Medicare managed care to small cities and rural communities in Illinois and Indiana, increased beneficiaries' satisfaction with the overall quality of care by 12 percentage points. These findings imply that introducing an organized system of health care into rural areas and small cities for Medicare beneficiaries can enhance access to and satisfaction with care.

The other MCOs either had no effect on or increased beneficiaries' access and satisfaction according to most measures. However, two MCOs, Peoples Health Network and SCHP, increased the likelihood that beneficiaries were not able to see a specialist when they thought they needed to and reported negative consequences. This finding is intriguing because these two MCOs offered POS benefits. Peoples Health Network offered a triple-option product, and SCHP offered a very limited POS product with an "authorized out-of-network services benefit." The increased barriers to specialty care reported by enrollees in these two MCOs may reflect the possibility that some enrollees initially misunderstood the POS benefits offered.

c. Effects for Beneficiary Subgroups

In the FFS sector of the demonstration markets, disabled beneficiaries, nonwhites, and those in poor physical and mental health were more likely than other beneficiaries to report access problems and to be less satisfied with their care. The effects of the demonstration did not vary much across subgroups, so the pattern observed in the FFS sector persisted in the MCOs.

A substantial percentage of under-65 disabled beneficiaries and those in poor physical and mental health had trouble obtaining prescription drugs, both in the FFS sector and in the demonstration MCOs. For example, 29 percent of under-65 disabled nonenrollees reported that on at least one occasion, they had not gotten a prescription filled because of an inability to pay, and this percentage was not significantly reduced by enrollment in an MCO. Thus, financial barriers to prescription drugs were a problem for the most vulnerable beneficiaries in the demonstration MCOs as well as in FFS Medicare.

d. Enrollees' Understanding of their MCOs

Studies have shown that Medicare beneficiaries in the FFS sector often find it difficult to understand the Medicare program. We also found that enrollees in the demonstration often had a poor understanding of their coverage. Twenty-nine percent of enrollees reported knowing little or nothing about how their MCO works and how to get services paid for. Beneficiaries enrolled in MCOs with out-of-network coverage had the poorest understanding of their coverage. Over one-third of such enrollees did not understand that they had access to out-of-network providers, but that they would pay a higher copayment for this care. These findings point to a potentially serious problem: if beneficiaries do not understand an MCO's rules and procedures, their access to care can be limited or delayed, and they can be exposed to unexpected out-of-pocket costs.

e. Enrollees' Use of Out-of-Network Services

Nine percent of demonstration enrollees reported that they had received services from a physician outside of their MCO's network. Enrollees in POS and PPO products were not substantially more likely to have gone outside the network for physician services than were enrollees in products with no out-of-network coverage. Among the MCOs that offered out-of-network coverage, the percentage of enrollees who had gone outside the network for physician services varied from 7 percent to 12 percent. Among MCOs that did not provide out-of-network coverage, the corresponding range was from 8 percent to 10 percent. The relatively low use of out-of-network services by enrollees in PPO or POS products is not surprising, since these MCOs tried to limit the use of out-of-network care by restricting the number or types of services that enrollees could receive outside the network or by imposing much higher cost-sharing for these services.

Overall, 74 percent of the enrollees who used out-of-network services spent less than \$100 out of pocket for these services, but 4 percent reported spending more than \$500. Of those enrollees who went outside their MCO's network, 64 percent did so to receive specialist's services.

B. DISCUSSION

The Medicare Choices Demonstration achieved mixed results and offers some lessons for the M+C program. First, the demonstration experience indicates that PSOs face important challenges in successfully contracting with Medicare. For instance, they must deal not only with their limited experience with some managed care functions but also with the inherent conflicts a provider system faces in attempting to establish appropriate provider incentives and modify practice patterns. The PSOs that were selected for the demonstration were among the most qualified in the nation to contract with Medicare. The fact that so many dropped out of the demonstration suggests that relatively few PSOs are likely to enter M+C in the near future, and those that do may be less successful than HMOs.

On the positive side, the demonstration MCOs attracted a more representative mix of enrollees than has been attracted to Medicare HMOs. This was particularly true of the MCOs offering POS products. Thus, future participation by such MCOs could offer beneficiaries a more meaningful and desirable choice of health plans, which could lead to increased enrollment in M+C. In addition, the demonstration MCOs both provided access to care that was comparable to access in the FFS sector and increased beneficiaries' satisfaction with care. However, the higher disenrollment rates experienced by MCOs with POS products and beneficiaries' poorer understanding of such products suggests that HCFA will need to devote attention to helping beneficiaries understand these products and to evaluating their effects.

Finally, we were not able to evaluate the effects of new risk adjusters on Medicare program costs or MCO financial performance -- one important goal of the demonstration -- because the MCOs were not able to submit the required encounter data. The problems they faced in this area highlight the challenge of collecting complete encounter data from MCOs in the future. In response to this situation, HCFA is requiring, under M+C, a more limited set of data elements than were required under the demonstration and is initially using a risk adjuster that is based on inpatient hospital encounter data only. The demonstration suggests that HCFA should anticipate substantial challenges and delays in moving to a more complete encounter data system.

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APPENDIX A

SAMPLING AND WEIGHTING METHODOLOGY



SURVEY SAMPLING AND WEIGHTING METHODOLOGY

In this appendix, we provide a more detailed description of the sampling and weighting methodology used for the beneficiary survey.

MCOs INCLUDED IN THE SURVEY

Ten of the 13 MCOs that participated in the demonstration were included in the survey. We excluded three MCOs—Florida Hospital Healthcare System, Ohio Health Alliance, and St. Joseph's—because they announced their intention to withdraw from the demonstration before we conducted the survey, and we were concerned that those announcements may have influenced enrollees' responses. Two of the MCOs included in the survey—Crozer-Keystone and Yellowstone—withdrew from the demonstration after the survey was conducted.

Because UCSD Health Plan became operational much later than others, we conducted the survey at two different time periods. Data collection for the first nine MCOs occurred from December 3, 1998 through May 13, 1999, while data collection for UCSD occurred from December 7, 1999 through February 14, 2000.¹

Some demonstration MCOs were required to participate in the Health Outcomes Survey (HoS) and/or the Medicare Consumer Assessment of Health Plans Survey (CAHPS) prior to our fielding of the evaluation survey. HoS and CAHPS are annual surveys of Medicare managed care enrollees, which also collect data on health status (HoS) and access and satisfaction (CAHPS). HoS samples 1,000 enrollees per MCO each year while CAHPS samples 600 enrollees per MCO each year. Five demonstration MCOs were included in CAHPS when we fielded our evaluation survey, and three

¹If St. Joseph's had not withdrawn from the demonstration, data collection for this MCO would have occurred at the same time as for UCSD, since they became operational at approximately the same time.

were included in HoS.² For these MCOs, we avoided including enrollees in our sample who had been selected for the HoS and CAHPS samples, due to the similarity between the survey questionnaires. In excluding enrollees who had been sampled for HoS and CAHPS, we preserved the probability structure and self weighting characteristics of the evaluation survey.

TARGET POPULATION

The target population for this survey was comprised of Medicare beneficiaries enrolled in the ten demonstration MCOs and beneficiaries in the fee-for-service (FFS) Medicare program living in the market areas of these demonstration MCOs. The target population was further restricted to beneficiaries with both Part A and Part B Medicare coverage and those for whom Medicare was the primary payer. Beneficiaries with end stage renal disease (ESRD) were not permitted to enroll in the demonstration plans, and as a consequence were also excluded from this evaluation.³ ESRD beneficiaries constitute less than 1 percent of the Medicare population and differ greatly from the rest of the Medicare population in their health care needs and patterns of service use. Sample members who died between the time of sample selection and the interview were also excluded from the study.

For the nine MCOs that were included in the first wave of the survey, the *enrollee* population was defined as those eligible Medicare beneficiaries who were continuously enrolled in a

²Crozer-Keystone, Independence Blue Cross, and Memorial Sisters of Charity were included in both CAHPS and HoS in the year in which we began fielding the evaluation survey. Health Partners and UCSD were included in CAHPS only. The year in which MCOs had to begin participating in these two surveys depended on when their contracts with HCFA were signed.

³Beneficiaries who develop ESRD *after* enrolling in a demonstration plan were permitted to remain enrolled in the plan.

demonstration MCO for at least two months during the period from August 1997 through July 1998.⁴ For UCSD, the corresponding time period was specified as July 1998 (which is when the MCO started serving enrollees) through July 1999. The enrollee population thus included beneficiaries who were enrolled in the demonstration and then disenrolled (before the sampling date) after two or more months of experience in the MCO. The *nonenrollee* population consisted of Medicare beneficiaries living in the market areas of the demonstration plans and covered by Medicare for at least two months as of the sampling date, but not enrolled in any Medicare MCO during the period from August 1997 through July 1998 (July 1998 through July 1999 for UCSD).

SAMPLING FRAME

The sampling frame for both enrollees and nonenrollees was constructed using the Medicare Enrollment Database (EDB). The EDB contains data on individuals who are or have ever been covered by the Medicare program. Demonstration enrollees were identified from the variables on the EDB that indicated beneficiaries who were currently enrolled, or had ever been enrolled, in a Medicare managed care plan (including one of the demonstration plans). This set of variables contains information on up to 60 current and past periods of enrollment in Medicare managed care plans, including the identification (ID) number of the plan and the beneficiary's enrollment date and disenrollment date (if applicable). For enrollees in the MCOs included in CAHPS and HoS, HCFA provided information that allowed us to determine the beneficiaries who were eligible for these surveys as well as the IDs of the sample individuals.

⁴Beneficiaries who were enrolled in a plan for only one month as of the sampling date were excluded because these individuals were unlikely to have had enough experience with the plan to answer questions about their access to care and satisfaction with care.

The nonenrollee frame was constructed by identifying beneficiaries who lived in the counties served by the demonstration MCOs. Beneficiaries were excluded from the nonenrollee frame who were enrolled in a demonstration MCO or any other Medicare MCO at any time during the one-year period prior to the sampling date.

SAMPLE SELECTION

Sample selection was independently executed for enrollees and nonenrollees. Both selections were based on stratified sample designs with predetermined stratum sample sizes. The enrollee population was stratified by the ten demonstration MCOs (nine MCOs at Time 1 and one MCO at Time 2) and the sampling for enrollees was independent across MCOs. These ten demonstration MCOs were located in ten market areas, consisting of the seven market areas other than Philadelphia and three market areas within Philadelphia. Philadelphia was viewed as three market areas because the enrollees in the three plans in Philadelphia (Crozer-Keystone, Health Partners, Independence Blue Cross) were distributed very differently with respect to zip codes. Some zip codes were found in more than one market area, however, so special steps were taken in sampling to ensure that nonenrollees were not selected for multiple plans' comparison groups.

The nonenrollee samples were selected so that their geographic distribution by zip code conformed to that of the enrollee population from that market area. Matching the nonenrollee sample to the enrollee population distribution by zip code ensured that service environment and regional variations in practice patterns were the same for enrollees and nonenrollees. As a consequence, nonenrollees were only selected from zip codes where enrollees resided.⁵ A small percentage of enrollees had zip codes outside their plan's service area. We included such enrollees

⁵Nonenrollees were only of interest for comparison to the enrollee population. Separate estimation capability for this population was not of interest.

in our sample because they were individuals who had disenrolled and moved outside the plan's service area. However, the nonenrollee sample was restricted to the plan's service area.

Enrollees. The first step in sampling enrollees was to stratify the enrollee frame into ten strata corresponding to the ten demonstration plans ($h=1,2, \dots, 10$). To ensure that the sample size selected from the k th zip code area was proportional to its plan h enrollment size, the enrollees within each stratum were sorted by zip code and a sample of $n_e(h,+)$ plan h enrollees was selected using Chromy's sequential minimum replacement sample selection procedure. Chromy's (1979) procedure selects a pps sample within the same zones as that of a pps systematic sample, but makes the selection *at random* within each zone while controlling the selection probability for units crossing zone boundaries. This procedure was chosen because it allowed us to select a self-weighting random sample of enrollees while constraining the sample size $n_e(h,k)$ from the k th zip code of the h th plan to be either the integer portion of $n_e(h,k) = n_e(h,+) \frac{N_e(h,k)}{N_e(h,+)}$ or the next larger integer, where $N_e(h,k)$ was the enrollee population size in the k th zip code area of the h th plan and $N_e(h,+)$ was the total enrollees across all zip codes.

For the plans surveyed previously in the 1998 HoS or the 1998 CAHPS, enrollees selected for the HoS and CAHPS were excluded from the frame prior to sample selection. Both HoS and CAHPS used simple random sampling to select the sample from each plan's frame. Hence, the *nonsampled* cases from their frames are also a simple random sample from that frame. Hence, excluding the previously sampled cases complicated the sampling for the evaluation but did not negatively impact the quality of the final sample.

The HoS and CAHPS frames of enrollees overlapped but were not identical and both overlapped but were not identical to the frame for the evaluation. Conceptionally, the total enrollee population for this evaluation can be regarded as partitioned into these parts: (1) enrollees eligible for the HoS

and the CAHPS, (2) enrollees eligible for the HoS but not the CAHPS, (3) enrollees eligible for the CAHPS but not the HoS, and (4) enrollees not eligible for the HoS or CAHPS. The first step in sample selection was to create a sampling weight for the portion of the frame that remained after the exclusion of HoS and CAHPS sampled beneficiaries. This frame sampling weight was constructed as the inverse of the probability of *not* being selected for the HoS and CAHPS samples. Because sample selection for HoS and CAHPS was independent, the probability of a beneficiary not being selected for one or both of these two samples is the product of the probability of not being selected for the HoS times the probability of not being selected for the CAHPS. Hence the frame sampling weight for enrollees $FW_e(hi)$ was defined as zero for members of the HoS and CAHPS samples and as

$$FW_e(hi) = \begin{array}{ll} \frac{N_{HoS}(h)}{N_{HoS}(h) - n_{HoS}(h)} \frac{N_{CAHPS}}{N_{CAHPS}(h) - n_{CAHPS}(h)} & \text{for members of both frames} \\ \frac{N_{HoS}(h)}{N_{HoS}(h) - n_{HoS}(h)} & \text{for members of the HoS frame only} \\ \frac{N_{CAHPS}}{N_{CAHPS}(h) - n_{CAHPS}(h)} & \text{for members of the CAHPS frame only} \\ 1 & \text{for members of neither frame} \end{array}$$

where n_{HoS} and N_{HoS} are the HoS sample size and population size, and n_{CAHPS} and N_{CAHPS} are the CAHPS sample size and population size. Next, Chromy's procedure was used for selection of a probability minimum replacement sample with the frame sampling weight used as the size measure. This approach ensured that the overall probability of inclusion in the evaluation sample was equal for all enrollees in plan h regardless of their membership in the HoS and CAHPS frames. That is, with a sample size of $n_e(h, +)$ enrollees selected from the total of $N_e(h)$ enrollees in plan h , the overall

probability of selection for each sampled enrollee can be shown to be $n_e(h,+)/N_e(h,+)$ for all selections regardless of their membership in the HoS or CAHPS frames.

Nonenrollees. For each market area, the zip code distribution of the total *enrollee* population was used in allocating the nonenrollee sample across zip codes. This approach was chosen for the evaluation to ensure that the nonenrollee sample had the same underlying distribution according to zip code as the enrollee population. To make the predetermined $n_n(h,+)$ nonenrollee selections from the total $N_n(h,+)$ nonenrollees in the h th plan's market area, the $N_n(h,+)$ nonenrollees were first sorted into zip code areas ($k=1,2,\dots,K_h$). Proportionally more of the nonenrollee sample was allocated to zip code areas that had proportionally more of the enrollee population so that the unweighted distribution of the nonenrollee sample reflected the enrollee zip code distribution for the plan. The number of sampled nonenrollees from the k th zip code area of the h plan's market area was the integer portion of $n_n(h,k) = \frac{n_n(h,+) N_e(h,k)}{N_e(h,+)}$ or the next larger integer, where $N_e(h,k)$ is the total enrollees in zip code area k of the h th plan's market area and $N_e(h,+)$ is the total enrollees in the h th plan's market area. Within each zip code k , nonenrollees were selected with equal probability but across zip codes the selection probabilities varied. This sample allocation approach was chosen to produce approximately equal nonenrollee weights across all zip code areas *after* the weights were standardized to reflect the distribution of the enrollee population by zip code area.

Occasionally, we encountered enrollees who resided in counties outside of a plan's service area. The nonenrollee sample was selected so that its zip code distribution matched that of the enrollee frame for the plan's designated service area only. Enrollees residing in counties outside of the plan's service area were eliminated prior to defining the enrollee population distribution. After sorting the frame of nonenrollees in each plan's service area by zip code, we selected a probability minimum replacement sample of nonenrollees with the desired distribution using Chromy's

sequential sample selection procedure. To obtain the desired distribution reflecting the enrollee population, we defined the measure of size as the number of plan enrollees in the zip code divided by the number of nonenrollees in the zip code. Because we were attempting to replicate the enrollees' distribution rather than the nonenrollees', the sampling weights for nonenrollees varied across zip codes within each plan's service area. However, when the sampling weight was scaled to match the enrollee frame for the service area, the standardized weights were equal for all nonenrollees associated with the plan's service area.

The nonenrollee sampling approach was modified for the three Philadelphia plans. Here, the zip code distribution of enrollees partially overlapped across the three plans. To prevent multiple selection of the same nonenrollee, we used Chromy's procedure as a randomized rounding procedure to allocate each plan's nonenrollee comparison sample to zip codes in such a way that it mimicked the zip code distribution of the plan's enrollees. Then, we aggregated the zip code sample sizes across plans and selected a sample from each zip code based on this aggregation. The zip code samples were then randomly allocated to each plan based upon their allocated nonenrollee sample sizes.

WEIGHTING

To simplify and unify our estimation procedures, we produced analysis weights for all sampled enrollees and nonenrollees that accounted for the sample design and for nonresponse and that controlled for the differing distributions of nonenrollees by zip code areas⁶. Weighting occurred separately for enrollees versus nonenrollees with these three steps:

⁶ The principles underlying the weight development procedures described in this section are fully discussed by Cox (1989, 1991).

- To reflect selection probabilities based on the underlying sampling design, we constructed sampling weights.
- Nonresponse-adjusted weights were calculated by adjusting the sampling weights to compensate for nonresponse for the screener and for the interview.
- A standardization adjustment was made to the nonresponse-adjusted weights to bring their weight sums into alignment with the zip code distribution of the enrollee population.

The steps in producing analysis weights for enrollees and nonenrollees are documented in the remainder of this section.

Sampling Weights

Sampling weights can be viewed as the number of population units that the sample unit represents. Each sampled beneficiary was assigned the inverse of its selection probability as its sampling weight. The sampling weights for enrollees are constant within plans but varied across plans. For nonenrollees, the sampling weights also vary across zip code areas within plans.

Enrollee Sampling Weights. For sampled enrollees, the probability of selection was the probability of *not* being selected for the HoS or CAHPS times the conditional probability of being selected for the evaluation given that the enrollee had not been selected for the HoS or CAHPS. The sampling weight $Sw_e(h,k,i)$ of the i th enrollee in the k th zip code of the h th plan was constructed as product of inverse of these two probabilities or the frame weight $FW_e(hi)$ times the conditional selection probability $CW_e(hi)$. Recall that enrollees were selected with probability proportional to their frame weight. Hence, the conditional weight $CW_e(hi)$ for the i th enrollee in plan h can be written as:

$$CW_e(hi) = \frac{\sum_1^{N_e(h,+)} FW_e(hi)}{n_e(h,+) FW_e(hi)} = \frac{N_e(h,+)}{n_e(h,+) FW_e(hi)}$$

The sampling weight for enrollees $SW_e(h,k,i)$ for the i th enrollee in the k th zip code of the h th plan can then be written as:

$$SW_e(h,k,i) = FW_e(hi) CW_e(hi) = \frac{N_e(h,+)}{n_e(h,+)}$$

Note that the sum of the sampling weights over selections from the h -th plan equals the total number of enrollees $N_e(h,+)$.

Nonenrollee Sampling Weights. The sampling weight for nonenrollee i from the k -th zip code area of the h th's plan's market area was obtained as the inverse of its probability of selection or

$$SW_n(h,k,i) = \frac{\sum_{k,i} n_n(h,+) \frac{N_e(h,k)}{N_n(h,k)}}{n_n(h,+) \frac{N_e(h,k)}{N_n(h,k)}} = \frac{N_n(h,k)}{n_n(h,+) \frac{N_e(h,k)}{N_n(h,k)}}$$

As nonenrollees were only of interest as a comparison group for enrollees, our next step was to standardize the nonenrollee sampling weights so that they summed to the enrollee population count within each zip code k of the h th plan. The standardization adjustment factor for the k th zip code was $N_e(h,k) / N_n(h,k)$. The standardized sampling weight was then calculated as:

$$SW_{sn}(h,k,i) = \frac{N_n(h,k)}{n_n(h,+)} \frac{N_e(h,k)}{N_n(h,k)} = \frac{N_e(h,+)}{n_n(h,+)}.$$

Note that the standardized nonenrollee sampling weights for the h th plan's market area reflect the population distribution of plan h enrollees by zip code and add to the total number of plan h enrollees. The standardized nonenrollee sampling weight was used for the remainder of the weighting process.

Weighting Class Adjustment for Nonresponse

Use of sampling weights in estimation may result in misinterpretation of population characteristics due to the presence of nonresponse. Specifically, some enrollees and nonenrollees did not participate in the interview due to refusal, no telephone access, inability to locate them, never be at home despite repeated callbacks, and so forth. This type of nonresponse is commonly referred to as *total nonresponse*.

Weighting class adjustment of the sample weights was used to deal with total nonresponse. These adjustments were made by partitioning the sample into groups, called *weighting classes*, and then adjusting the weights of respondents within each class so that they summed to the class weight total for nonrespondents and respondents. First, weighting classes were defined based upon age and gender, with the same classes used for each plan's enrollees and nonenrollees.⁷ Then nonresponse adjustments were made to compensate for loss of eligibility information (screening nonresponse) and for loss of interview data for known eligibles (interview nonresponse).

⁷A separate weighting class was formed for beneficiaries that Medicare administrative data indicated to be deceased. No nonresponse could occur by definition for this class so the screening and interview nonresponse adjustment factors were set to 1.0.

Screening Nonresponse. Beneficiaries can be ineligible through death, enrollment in an MCO (for nonenrollees), lack of both Part A and B coverage, and so forth. Screening nonresponse results in total loss of information, including information that is needed to establish study eligibility. The first adjustment to the weights accounted for this loss of basic screening information needed to establish eligibility. The screening nonresponse adjustment factor $SA_b(b, h, c)$ for plan h beneficiaries of type b (e for enrollees and sn for standardized nonenrollees) in the c th weighting class was calculated as:

$$SA_b(h, c) = \frac{\sum_{h, k, i \in S(b, c)} SW_b(h, k, i)}{\sum_{h, k, i \in S_{gr}(b, c)} SW_b(h, k, i)}$$

where $S(b, c)$ is the set of sample members of beneficiary type b belonging to weighting class c , $S_{gr}(b, c)$ is the set of screening respondents of beneficiary type b belonging to weighting class c , and $SW_b(h, k, i)$ is the weight for the i -th person of beneficiary type b from the h plan and the k zip code before adjustment. The screening nonresponse-adjusted weight $SASW_b(c, h, k, i)$ for respondents of beneficiary type b was calculated as the product of this screening nonresponse adjustment factor and the sampling weight or

$$SASW_b(c, h, k, i) = SA_b(h, c) SW_b(h, k, i).$$

Screening nonrespondents were assigned a screening nonresponse adjusted weight of zero.

Interview Nonresponse. The next form of nonresponse adjustment accounted for the loss of interview data from beneficiaries who had been identified as eligible during screening. The same weighting classes were used for the interview adjustment as for the screening nonresponse adjustment, except that identified ineligible were combined into a separate class that received an interview adjustment factor of 1.0, reflecting the fact that once ineligibility is identified, no further

data are needed. For the remaining cases, the interview nonresponse adjustment factor $IA_b(h,d)$ for plan h beneficiaries of type b (e for enrollees and sn for standardized nonenrollees) in the d th weighting class was calculated as:

$$IA_b(h,d) = \frac{\sum_{h,k,i \in S_{it}(b,d)} SASW_b(c,h,k,i)}{\sum_{h,k,i \in S_{it}(b,d)} SASW_b(c,h,k,i)}$$

where $S_{it}(b,d)$ is the set of interview respondents of beneficiary type b belonging to weighting class d . The interview nonresponse adjusted weight $SW_b(c,d,h,k,i)$ for interview respondents was calculated as the product of this interview nonresponse adjustment factor and the screening nonresponse adjusted weight or

$$IASW_b(c,d,h,k,i) = IA_b(h,d) SASW_b(c,h,k,i).$$

Nonrespondents were assigned a weight of zero.

Standardization of Nonenrollee Weights

Socioeconomic characteristics of beneficiaries such as income, race, and age might be highly correlated with geographic areas in which they reside. In addition, the plan's geographic location can be expected to affect the decision to enroll. To eliminate the confounding effect of geographical differences between the two populations, we developed standardized enrollee and nonenrollee weights. We began by forming poststrata p , which were aggregations of zip codes containing at least 20 enrollees and 20 responding nonenrollees. Zip codes that were outside the service area of the plan were placed in a separate poststratum. The interview nonresponse adjusted weights for the plan's

enrollee and nonenrollee samples were separately poststratified to the enrollee population counts for that poststratum.⁸

Denote the proportion of plan h enrollees in the p th zip code defined poststratum by $N(h,p)/N(h,+)$. Our first step in poststratifying to the enrollee distribution was to create poststratum adjustment factors $P(h,b)$ for each beneficiary type b ($b=e$ for enrollees and $b=sn$ for standardized nonenrollees) as follows:

$$PA_b(h,p) = \frac{N_e(h,p)}{\sum_{h,k,i \in S_p(b,d)} IASW_b(c,d,h,k,i)}$$

Thus, the standardized factor for the p th poststratum of plan h will be the ratio of the number of enrollees to the sum of the interview adjusted weights for beneficiary type b cases within the zip code area comprising poststratum p . Note that the sum of the standardized weights for beneficiary type b for plan h will be same as the total number of enrollees in plan h .

Using the plan-specific standardized weights, we made domain-specific comparisons between enrollees and nonenrollees. It should be emphasized, however, that the resultant estimate of the nonenrollee proportion using the standardized weights does not produce descriptive statistics of the nonenrollee population itself. More discussions for standardized techniques can be found in LaVange and Williams (1982).

⁸For the Philadelphia plans, what constitutes the "enrollee population" in a zip code area depends upon the demonstration plan h for which the nonenrollee was selected for comparison.

APPENDIX B

SUPPLEMENTARY TABLES FOR CHAPTER II

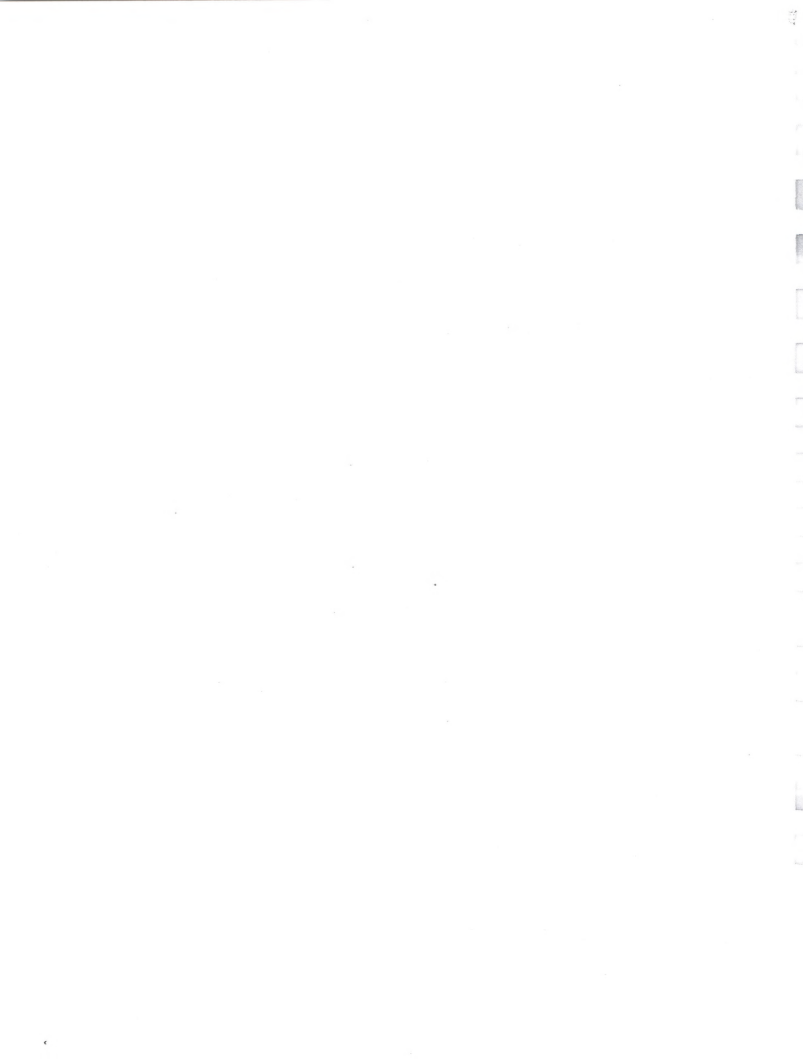


TABLE B.1
ELIGIBILITY FOR THE SURVEY

	Enrollees	Nonenrollees
Total Sample	5,252	5,252
Number Ineligible	129	574
Percent Ineligible	2.5	10.9
Reasons for Ineligibility (%)		
Deceased	82.9	30.0
Sampled as enrollee, but not enrolled ^a	14.0	N.A.
Sampled as nonenrollee, but subsequently enrolled in MCO	N.A.	67.6
Other ^b	3.1	2.4

^aThese individuals were sampled as enrollees but claimed never to have been enrolled in a demonstration MCO.

^bOther ineligible includes beneficiaries not continuously covered by Part A and Part B and those with end-stage renal disease. These characteristics were determined from a more recent update of the Medicare Enrollment Database than was used to select the sample.

N.A. = Not applicable.

TABLE B.2

RESPONSE RATES AND REASONS FOR NONRESPONSE
(Percentages)

MCO	Response Rate	Reason for Nonresponse				
		Refusal	Unable to Locate by Telephone	Maximum Calls/ Effort Ended	Unable to Respond/ No Proxy Available	Other
Enrollees						
All Plans	65.3	14.3	11.7	7.1	1.2	0.5
Independence Blue Cross	56.3	24.8	8.4	8.4	1.5	0.5
People's Health Network	70.3	13.5	6.6	7.5	1.7	0.4
Croyzer-Keystone	65.5	9.9	15.1	7.0	1.7	0.8
Memorial Sisters of Charity	60.1	16.9	13.4	8.2	0.8	0.6
SCHP	73.4	10.3	8.8	6.3	0.8	0.4
Health Alliance	76.6	15.4	3.4	3.8	0.6	0.2
Health Partners	49.3	5.9	30.0	12.9	1.1	0.8
Mount Carmel	70.6	13.5	10.5	4.0	1.4	0.0
Yellowstone Community Health	71.4	16.7	5.9	4.2	1.1	0.6
Nonenrollees						
All Plans	56.6	17.4	17.2	7.2	1.3	0.4
Independence Blue Cross	52.1	20.8	17.5	8.0	0.8	0.8
People's Health Network	61.1	16.5	14.0	6.7	1.2	0.4
Croyzer-Keystone	50.4	21.1	18.1	8.0	2.1	0.2
Memorial Sisters of Charity	56.5	17.5	18.6	6.4	0.8	0.3
SCHP	55.4	18.0	20.0	5.4	1.2	0.0
Health Alliance	68.2	14.9	7.2	7.4	2.1	0.2
Health Partners	44.8	10.4	33.0	9.6	1.3	0.8
Mount Carmel	62.2	15.8	14.0	5.8	1.6	0.6
Yellowstone Community Health	60.8	22.7	9.1	6.8	0.6	0.0

APPENDIX C

SUPPLEMENTARY TABLES FOR CHAPTER III



TABLE C.1
BENEFITS AND COST SHARING FOR SELECTED MEDICARE SERVICES
IN 2000

MCO	Product Type	Monthly Premium	Gatekeeper	Physician Office Visits	Inpatient Hospital Services	SNF Services	Emergency Room ^a
Atlanta, GA							
SCHP ^b	POS	\$0	Yes	\$10 copay	Covered in full	Covered in full up to 100 days per benefit period	\$50
Champaign, IL							
Health Alliance Medical Plans	HMO	\$45	Yes	\$5 PCP copay, \$15 specialist copay	Covered in full	Covered in full up to 100 days per benefit period	\$50
Columbus, OH							
Mount Carmel Health Plan ^b	HMO	\$45 \$65	Yes	\$15 PCP copay \$25 specialist copay	Covered in full	Covered in full for 125 days	\$50 copay
Houston, TX							
Memorial Sisters of Charity ^b	POS	\$0	Yes	\$5 PCP copay, \$10 specialist copay	Covered in full	Covered in full, 100 days per benefit period	\$50 copay
New Orleans, LA							
Peoples Health Network ^b	Triple Option	\$0	Yes	\$5 copay	Covered in full	Covered in full 100 days per benefit period	\$50
Philadelphia, PA							
Health Partners	HMO	\$0	Yes	\$5 copay	Covered in full	Covered in full up to 100 days per benefit period	\$35 copay
Independence Blue Cross^b	PPO						
		\$70	No	\$15 PCP copay \$25 specialist copay	Covered in full	Covered in full, 100 days per benefit period	\$40 copay
		\$100	No	\$5 PCP copay \$10 specialist copay	Covered in full	Covered in full, 100 days per benefit period	\$40 copay
		\$125	No	\$10 PCP copay \$15 specialist copay	Covered in full	Covered in full, 100 days per benefit period	\$40 copay
San Diego, CA							

TABLE C.1 (continued)

MCO	Product Type	Monthly Premium	Gatekeeper	Physician Office Visits	Inpatient Hospital Services	SNF Services	Emergency Room ^a
UCSD Health Plan	HMO	\$0	Yes	\$0 PCP copay \$7specialist copay	Covered in full	covered in full up to 100 days per benefit period	\$20 copay

^aFor all MCOs, the emergency room copay is waived if the enrollee is admitted.

^bFor the PPO and POS products, the cost-sharing and benefits shown are for in-network care. For the triple option product, the cost-sharing and benefits shown are for in-network care coordinated by a PCP. Self-referral and out-of-network care require higher cost-sharing and the benefits are often less generous.

TABLE C.2
ADDITIONAL BENEFITS OFFERED BY DEMONSTRATION MCOs
IN 2000

	Outpatient Prescription Drugs, ^{a,b}	Vision Exams	Eyeglasses	Hearing Exams	Hearing Aids	Dental Care
Atlanta, GA						
SCHP	Up to \$1,250 annual benefit, \$10 copay	\$10 copay 1 exam/2 years	\$15 copay , 20% discount on eyewear, and \$100 plan credit every 24 months	\$10 copay	Not covered	Not covered
Champaign, IL						
Health Alliance Medical Plans	Not covered	\$15 copay 1 exam/year	Not covered	Covered in full 1 exam/year	Not covered	Not covered
Columbus, OH						
Mount Carmel Health Plan	Up to \$800 per year, \$5/\$20 copays	\$25 copay 1 exam/year	Not covered	\$15 or \$25 copay depending on type of provider 1 exam/year	Not covered	Not covered
Houston, TX						
Memorial Sisters of Charity	Up to \$1,800 per year, \$5/\$15/\$25 copays	\$10 copay 1 exam/year	Covered up to \$65 every year	\$5 copay/PCP \$10 copay/specialist 1 exam/year	Covered up to \$65 every year	Not covered
New Orleans, LA						
Peoples Health Network	Up to \$1,200/year, \$7/\$15 copays	\$10 copay 1 exam/year	1 pair of glasses or contact lenses/year	\$5 copay	Not covered	Not covered
Philadelphia, PA						
Health Partners	Up to \$1700 per year, \$5/\$10 copays	1 routine exam/year	Covered up to \$100 every 2 years	\$5 copay, every 2 years	Covered up to \$500 every 3 years	2 routine exams and cleaning every year covered in full
Independence Blue Cross						
\$70 premium	Not covered	Not covered	Not covered	Not covered	Not covered	Not covered

TABLE C.2 (continued)

	Outpatient Prescription Drugs, ^{a,b}	Vision Exams	Eyeglasses	Hearing Exams	Hearing Aids	Dental Care
\$100 premium	Unlimited generic, no brand-name \$10 generic copay	Not covered	Not covered	Not covered	Not covered	Not covered
\$125 premium	Unlimited generic, up to \$500 brand-name per year, \$10/\$15/\$25 copay	Not covered	Not covered	Not covered	Not covered	Not covered
San Diego, CA						
UCSD Health Plan	Unlimited generic, up to \$2000 brand-name per year \$5/\$12 copays	\$0 copay 1 exam/year	1 pair of glasses every 2 years, \$20 copay	\$7 copay per visit	Not covered	\$25 copay for cleaning 2 cleanings/year

^aWhen two copayments are shown for prescription drugs, the first refers to generics and the second to brand name drugs. A third copay refers to non-preferred drugs.

^bSt. Joseph's offers a prescription drug benefit only in the southern region of its service area.

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